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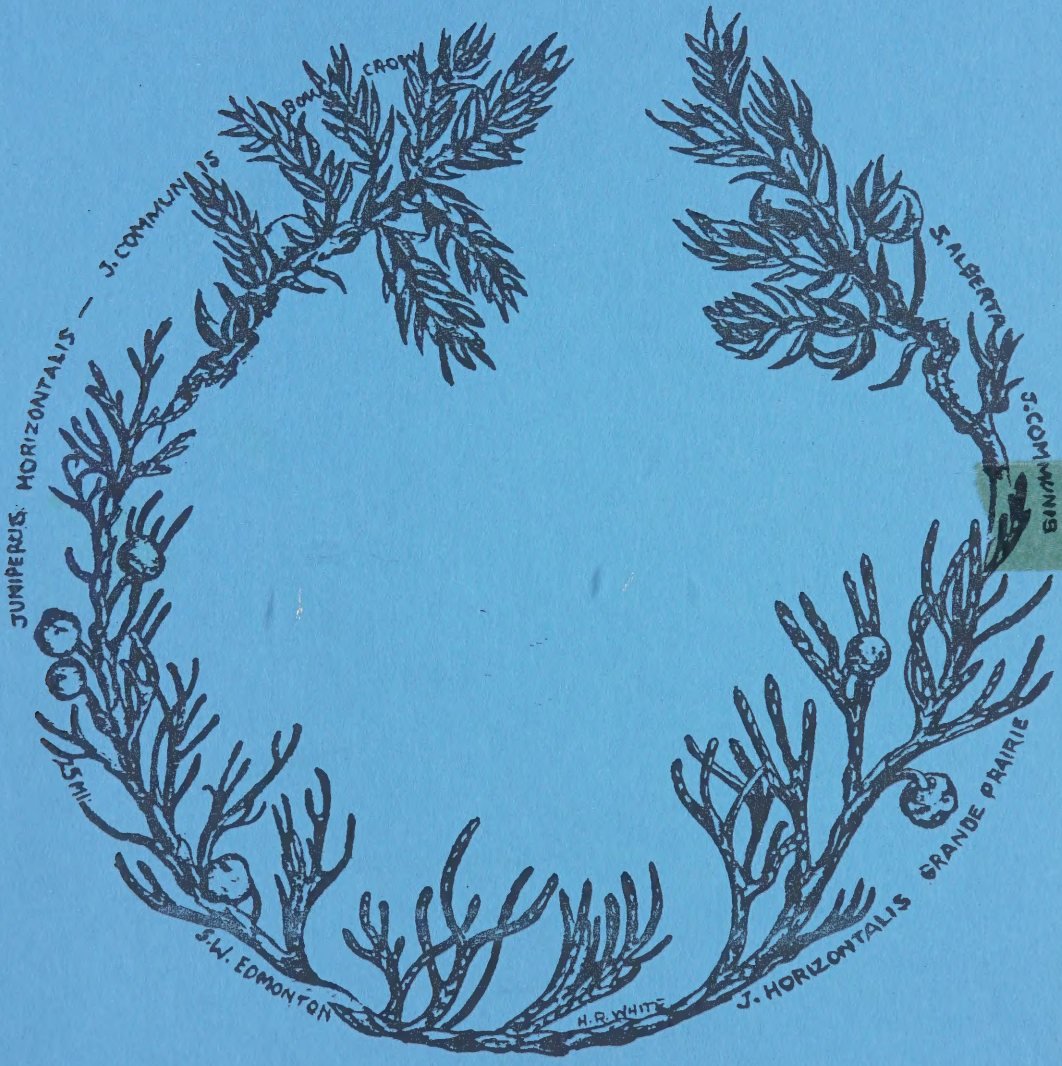

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ALBERTA NATURALIST

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DEADLINES for submission of material are: January 15, April 15, July 15 and October 15. Details at end of this issue.

COVER: Once again, Alberta nature artist, Helene White, has provided us with a cover and cover story, this one very appropriate for December and Christmas! Special thanks to Helene for coming to the rescue at the last minute by providing a September cover when the printers lost the original by Bruce Milner. - M.K.M.

JUNIPER

Herb of Protection

by (Mrs.) H.R. White
#102 - 13910 Stony Plain Rd.
Edmonton, Alberta T5N 3R2

Dry banks, sandy hillsides and rocky sandy soil offer a compatible habitat for the Juniper, an aromatic evergreen of the pine family. We rarely meet the *Juniperus scopulorum* for it prefers the mountains, but Common Juniper (*J. communis*) and Creeping Juniper (*J. horizontalis*) are contented to reside in the less lofty areas of our province.

The Common Juniper is a bristly spritely shrub that can attain the grand height of three feet. Its leaves are needle-like and adorn the countless branches in a profusion of whorls of threes. Tucked among these leaves at their axils are pale blue "berries." These tiny globules actually cover a miniature cone. Creeping Juniper also trims itself with "berries" of deep blue, delicately powdered with a white bloom; they appear at the end of branchlets. A ground hugger, this conifer prefers to spread its branches out into a thick carpet and rarely reaches a height of one foot. The leaves are tiny and hug the branchlets so tightly they appear scale-like. This habit of growth shows the beauty and grace of the branches to great advantage.

The pungent aroma of this evergreen was a vital part of Christmas during Teutonic times. Branches and berries were burned on the hearth throughout the Twelve Days of Christmas to drive off witches and the devil. Added protection was given to each home by mounting swags of this herb over their doors; for witches were bound by the devil's decree, to count the needles before entering, an onerous task they preferred to pass up. At the height of the celebrations on Christmas and New Year's Day children formed parades and threaded their way through the towns carrying high, bundles of burning Juniper and other aromatic herbs. All to the accompaniment of drums, whistles, horns, bells and snapping whips to ensure the peace of the holiest days.

We still enjoy evergreens in our homes at this time of year, rather as symbols of faith and eternal life - the modern and ancient practises merge. Unfortunately we have forgotten the beautiful Juniper, and the only acceptable way it may enter into the holiday revels is through the gin punch. Contributing still nevertheless to a celebration full of light and warmth during these cold dark days of the Winter Solstice.

Gin = final corruption of the world genievre or juniper.

SPECIMENS COURTESY - J. HRAPKO - PROVINCIAL MUSEUM HERBARIUM
Juniperus communis - Bow Crow Forest Reserve
J. communis - S. Alta. - Writing-on-Stone
J. horizontalis - 25 mi. S.W. of Edmonton on banks of North Saskatchewan River

STENONYCHOSAURUS: ALBERTA'S "INTELLECTUAL" DINOSAUR

by John H. Acorn
39 Wolf Crescent
Edmonton, Alberta T5T 1E1

It was a pleasant evening in the badlands. The bare sand hills began to reflect the colour of the setting sun, and their usually depressing lifelessness became more bearable in the warm glow of the evening. The occasional thunderclap warned of an approaching storm, but in the badlands you never really believe it's going to rain until you feel it.

A few yards away John Walper was stretched out on an uncomfortable-looking ridge, peering intently at the ground, looking for fossils. His eyes are finely tuned to this sort of work, and his patience is incredible. A true "badlander," he has known this area ever since he could walk. "What the hell is this?" he muttered, and then "Hey, Acorn, you find that primate yet?"

"Just about had him, I think he just snuck under this rock--how about you?" I called back.

"Lots of weird stuff, but no mammals yet."

"Oh well, keep looking, we've still got another hour of good light."

John and I were fossil hunting, in one of the richest fossil beds anywhere--Dinosaur Provincial Park, Alberta. We were both working as interpretive naturalists there; my first summer and John's fifth. I had told him jokingly that I planned to discover the world's oldest primate in these dinosaur-rich rocks, and accordingly we made an after-dinner expedition to a "likely" area for such things. So far, though, we had found nothing of the sort. Nevertheless, all the old familiars were there; soft-shelled turtles, rat fish, garpike, horned dinosaurs and crocodiles. It was like an evening walk along a favourite trail, seventy million years in the past.

Then something caught my eye. Half-buried in sandstone was a piece of fossil bone, which after a few moments of deliberation, took on the unmistakable likeness of a fossil cast I had been examining only the day before; a cast of one of the rarest and most famous fossils ever found in these hills--the skull of *Stenonychosaurus inequalis*. Only two such specimens have ever been found previously; and both are highly prized by the institutions which house them: American Museum of Natural History and the National Museum of Canada. Looking back at the fossil at my feet, my mind flooded with questions. Could this be the third *Stenonychosaurus* skull? Was it something else, perhaps something even more spectacular? Or was my imagination running away with me. I called Walper over for a second opinion.

He bent down cautiously to examine the fossil. "Hard to say Acorn," he remarked. "Looks pretty bizzare to me." I suspected at this point that he and I were going through the same dilemma. Then, carefully removing a clod of sandstone from the middle of the bone I uncovered what was now very obviously a braincase. At this, all doubt left our minds. We excitedly congratulated each other and immediately started combing the area for other bones or fragments. Our search was cut short, though, by the rainstorm which now began to move over us.

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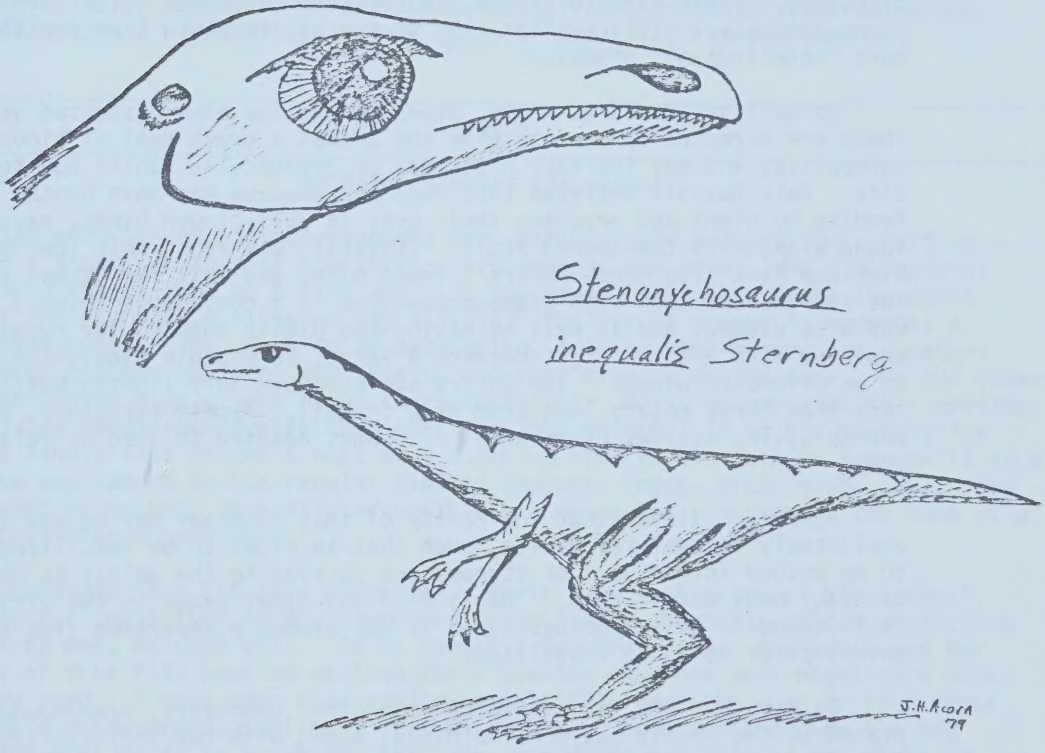
Stenonychosaurus
inequalis Sternberg
J.H. Acorn
'79

A few weeks later the specimen was excavated, and it now resides in the collection of the Provincial Museum of Alberta. It is the finest of the three known skulls, and consists of the frontal and parietal bones (the top of the skull) including the roof of the braincase, and the tops of the eye sockets. It is amazingly similar to the other two specimens, but is much more complete in the posterior region of the skull. Enough of the skull is present, however, to demonstrate two very interesting aspects of this animal, the most obvious of which is its large brain. Although dinosaurs as a group are renowned for their stupidity, the brain of *Stenonychosaurus* is as large as that of a comparable-sized bird. This, in Dr. Dale Russell's opinion, would allow these animals to perform many complex actions and behaviour patterns. *Stenonychosaurus* watching would have been at least as interesting as bird watching, and indeed these animals may even have been warm-blooded. This latter opinion is shared by Adrian Desmond, who mentions *Stenonychosaurus* in this context in his popular book "The hot-blooded dinosaurs." Warm-blooded or not, though (and I suspect quite strongly that it was), *Stenonychosaurus* still qualifies by virtue of its brain size for the title of our most "intellectual" dinosaur.

As well as its large brain, *Stenonychosaurus* also possessed very large eyes. These are directed forward to give the animal a great deal of binocular depth perception, and may indicate nocturnal or crepuscular habits due to their great size. Dale Russell believes that *Stenonychosaurus* may have hunted small mammals, feeding by night and grasping their prey in well-clawed hands, parts of which were found along with the second skull. (Russell, who found this specimen, was at Dinosaur Park five hours before I found mine, and left for Ottawa before he could see it--perhaps luck with *Stenonychosaurus* is a contagious thing.) The hind foot was also clawed, and as well as having two digits adapted for running, it was equipped with a third digit bearing a large, formidable claw which may have served as an offensive weapon. The entire skeleton was very lightly built, and probably less than three meters long from head to tail. Almost certainly, *Stenonychosaurus* was an agile, active, carnivorous dinosaur, adapted to feed on relatively small prey.

Russell believes that the rarity of this dinosaur may be due to its exclusively terrestrial habits, such that in order to be fossilized they would have to be washed into rivers or streams and carried to the deltas in which Alberta's dinosaur beds were formed. The lack of any other bones in the vicinity of "my" skull supports this hypothesis, as it was probably separated from the rest of the animal prior to being fossilized.

In terms of its relationships with other dinosaurs, *Stenonychosaurus* is placed in the family Saurornithoididae, along with two very similar creatures from Mongolia; *Saurornithoides mongoliensis* and *S. junior*. As well, there are two other genera (*Troodon* and *Macrophalangia*) which may or may not belong in this family (no one really knows since these are only known from teeth, jaws, or feet). The entire family, as well, is related to another group, the Dromaeosauridae, the most famous member of which is *Deinonychus*. *Deinonychus* was discovered by Dr. John Ostrom and in his opinion may have been ancestral to *Stenonychosaurus*. *Deinonychus* was a heavier animal, and may have killed larger prey, possibly hunting in packs. It is probably the only small carnivorous dinosaur to become well known among the general public, due to Ostrom's recent article on dinosaurs in National Geographic. Certainly, as Ostrom mentions, this is one of the most unusual dinosaurs unearthed in recent years, and I feel confident in extending this comment to include *Stenonychosaurus* as well. Hopefully, as new finds are made, the confusion surrounding those we already have will dissipate, and we will be able to gaze even more deeply into the lives of these fascinating extinct creatures.

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SKUNKS

by Helen Schuler (deceased)

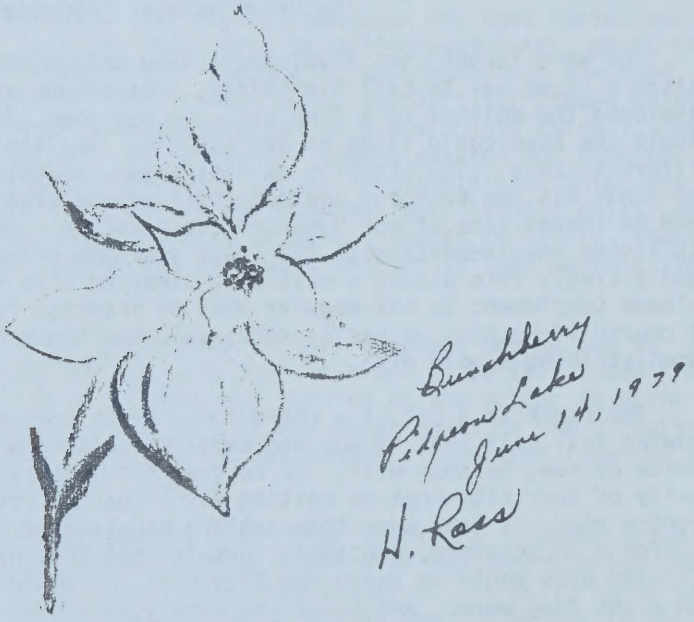
The word "skunk" has developed a very unfavourable connotation. Calling a person a skunk was to call him shifty, treacherous and mean. The old westerns developed the epithet to a fine art - "a low-down, dirty skunk" was the worst insult the hero could fling at any villain. Reality of course is somewhat a different story. The skunk is an easy going, amiable, non-aggressive creature who minds his own business and expects everyone else to do the same. On the other hand he shares some of our human characteristics. He is an opportunist - meeting his living requirements with the least possible effort. If in his seeking for food a kindly fate places a nest or a sleeping bird in his path he accepts it as a welcome supplement to his regular diet of insects, frogs, mice, grubs, etc. And of course if he hits an easily accessible hen house his reaction is the same as a human striking a gold mine.

The skunk is a bit of a character. He is very much aware of his arsenal, knowing full well that if any aggressor doesn't know about his unique protective device by now, he soon will. So he goes his leisurely way. One adult and her family of four kits kept me waiting for a quarter hour one dark night on a back country road. I came upon them ambling single file down the road in true skunk fashion - unconcerned, sublimely certain that this huge monster with the big blinding eyes would be aware who they were and would not dispute the right of way. How right they were! And since you simply do not herd skunks off the road, I resigned myself to awaiting their pleasure. And wait I did.

They are fearless even at a young age. We came across a young one along the road one day and stopped to admire his handsome markings. That little joker wasn't taking anything from any mechanical monster. Tiny as he was it stamped its feet and armed its business end at us absolutely certain we would heed the warning. And of course we did! Even a small skunk packs a wallop. I had assured a friend once that below a certain age skunks don't have scent. She trustingly told her sister, who taking her at her word let her children bring in a little skunk they had found. Things went well until the skunk got under the refridgerator and they tried to poke it out with a broom. The results were disastrous. I wonder just how old that skunk was.

The skunk is officially listed in Alberta as a "nuisance" animal. He is in bad repute with the farmer because he can create havoc in a hen house and with the farmer's wife because whenever the family dog encounters a skunk he comes home and sprawls in front of the door allowing pungent evidence of his latest adventure to permeate the whole house. The sportsman is down on him because he occasionally will make a meal of a sleeping game bird or its eggs - thus stealing what a hunter regards as his particular prey. In short - no one has much good to say about a skunk and yet he has his particular niche in the scheme of things. Elimination of this interesting animal would break one more strand in the web - and we would all be the poorer.

Editor's Note: The late Helen Schuler was one of the founders of FAN and a former Treasurer. She was very active in the Lethbridge club, serving as President among other duties. I commented on her support of the Alberta Naturalist earlier (A.N. 7:288-289, 1977), and a full obituary was written by Schultz and Bailey (A.N. 8: 43-46, 1978), with an addition by Houston (A.N. 8: 221, 1978). The above article was found in her files and sent to us by Hazel Ross. - M.K.M.



...AND I NEVER DID SEE A BIRD

by Doug Orr
Box 311
Barons, Alberta

"Water fowl smell," I moaned, as we rowed across the marsh.

"I think it's ducky," my friend replied. "But I geese I'm used to it."

"No, you're just loony," I assured him.

"The boat's bobolink around!! Avocet and watch for birds while I teal you about this marsh." I craned my neck, but owl I could see was fog.

"Lark, there's swan," he shouted.

"Gully, I still can't see anything."

"Wren ever will you learn to keep your eyes open?"

"I don't need to swallow your insults. From heron you can talk nicely to me."

"Quit your grousing; it's your tern to see something - I'm going to stork up with coffee."

"Well keep stilt in the boat; you'll dipper."

"Don't be bittern just because you haven't seen anything yet."

"Guan, I'll bet you didn't either. I'm as swift as you."

"Since you forgot to chickadee petrel I'm puffin from all this rowing."

"Then plover to the shore - it's ptarmigan home, anyway."

SPECIAL BOOK ANNOUNCEMENT

by Irma Dekker
3819 - 112A Street
Edmonton, Alberta

THE BIRDS AND BIRDERS OF BEAVERHILLS LAKE.

By Robert Lister.

Published by the Edmonton Bird Club with a grant from the Clifford E. Lee Foundation.

The long awaited book by Robert Lister will be coming off the press in November 1979. This price is $9.50. The proceeds will go to the Canadian Nature Federation and are destined for the upkeep of the Clifford E. Lee Nature Sanctuary in Devon, Alberta. The book has 264 pages and is illustrated with 9 photographs from the archives of the University of Alberta, with 14 black and white pen sketches by Edgar T. Jones, and with a pencil drawing by Harry Horton. Lillian Wonders made the maps, and Dick Dekker did the painting for the full-colour dust jacket.

Robert Lister's interest in birds began when he was a boy wandering through the woodlands, meadows and marshes of his native Hingham in Norfolk, England. His early association with Professor William Rowan on biological studies at Beaverhills Lake was the starting point of his life-long involvement with the lake and the beginning of his fifty-year career as an Alberta naturalist.

Dr. William Rowan, for many years chairman of the Zoology department of the University of Alberta, pioneered a field in avian biology now known as photoperiodism in birds. For almost 40 years Rowan collected at Beaverhills Lake and kept extensive notes on the birds and his own activities regarding them. It is on these notes that much of the book is based.

Since the early 1950's, the Edmonton Bird Club has made several trips annually to the lake. Its members, too, have contributed much to the knowledge of the avifauna of the lake and have added several new species to the list of the birds of Beaverhills. Many of their notes are also incorporated in the book. Although birds form a large part of the subject matter of Robert Lister's book, it is not just another bird book. Rather it is a story of the people and their association with the avifauna of what still remains a most fascinating place.

For your copy, please send cheque of $9.50 (including mailing and handling cost) made payable to the Edmonton Bird Club, P.O. Box 4441. Edmonton, Alberta. T6E 4T5.

...OVERHEARD

Man and his environment

"Mankind today is in desperate need of re-establishing some intimate and meaningful contact with his environment, which can serve as the basis for an environmental ethic." W.A. Fuller, "Tragedy in our national parks?". 1977. p.14

A PROBABLE HYBRID OF CANADA X SNOW GOOSE AT BEAVERHILL LAKE

by David M. Ealey[1], Alan R. Smith[2] and Jean-Francois Giroux[3]

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[3]Ducks Unlimited (Canada), 1190 Waverley Street, Winnipeg, Manitoba R3T 2E2

Hybridization among members of the bird family, Anatidae is not uncommon, both in captivity and in the wild. Gray (1958) listed nearly 400 interspecific hybrids within this family. No other bird family has been reported to have as many or as diverse a set of hybrids (Johnsgard 1960). Hybrids of many species with Canada Geese (*Branta canadensis*) have been reported in captivity, including crosses with Snow Geese *(Chen caerulescens)* (Bailey 1949; Gray 1958). However, wild hybrids are relatively rare (Palmer 1962).

On 8 April, 1979, we watched a large flock of waterflowl alight on the solidly frozen surface of the shallow impoundment, known as "A" Lake, constructed by Ducks Unlimited (Canada) at the SE corner of Beaverhill Lake in central Alberta. The flock initially consisted of over 1,000 Canada Geese, one White-fronted Goose (*Anser albifrons*), one white phase Snow Goose, and fewer than 100 ducks, including Mallards (*Anas platyrhynchos*), Pintails (*A. acuta*) and American Wigeons (*A. americana*). Additional Canada Geese landed until there were about 4,000 birds in all. Upon close inspection of this flock we noted a goose with skin and plumage colouration characteristics typical of both the Canada Goose and the Snow Goose. We observed this individual with a spotting scope (20 to 60x) for about halfan hour from a distance of about 150 m. The apparent hybrid remained in a small area in association with several Canada Geese and was several metres from either of the other two species of geese.

The plumage was essentially that of a Canada Goose while the leg colour and the bill shape and colour were typical of a Snow Goose. The chin, lores, forehead and crown were white and a distinct white stripe extended down the nape (Figure 1). A small patch of diffuse grey was visible at the top of the head. Extending from the head to the base of the neck was a black stocking identical to that of accompanying Canada Geese. However, the white cheek patch was absent. The plumage of the body was also identical to that of a Canada Goose. The tail and rump were black and the upper tail coverts were white, forming a broad band at the base of the tail. Both phases of Snow Goose have white rumps and different tail colouration; the white phase has a totally white tail while the blue phase has a dark grey tail and a narrow, white terminal band. The bill was short, stubby and pink, not long, sloping and black as in a Canada Goose. The legs, which were smaller than those of the Canada Geese, and feet were bright pink as in a typical adult Snow Goose. The hybrid was approximately one-fifth smaller than the accompanying Canada Geese, which were of a moderately large race.

A few published descriptions of suspected hybrids are availabe for comparison with our observation. Nelson (1952) reported four probable hybrids of Canada Geese with blue phase Snow Geese occurring in the wild. Bailey (1949) described a captive hybrid between a white phase and a Canada. Prevett and MacInnes (1973)

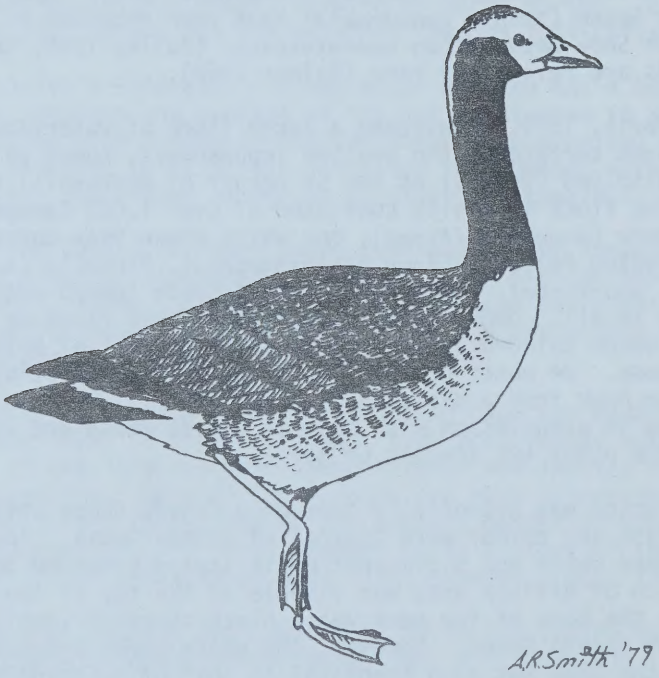

Fig. 1. Apparent hybrid Canada x Snow Goose at Beaverhill Lake.

recorded 30 hybrids between small Canada Geese (*B. c. hutchinsii*) and blue phase Snow Geese, occurring in central U.S. and on arctic breeding grounds. These published observations agree with ours in many respects. Although the plumage and skin colouration was quite variable, each hybrid showed intermediate features. Few of the hybrids had bills and legs as bright pink as we describe here. Also, the majority of the hybrids had lighter breast plumage than the Canada Geese parent stock, unlike our description. Prevett and MacInnes (1973) noted that the hybrids were somewhat larger than the small Canada Geese parents, but smaller than the blue phase Snow Geese, in most cases. The most consistent feature in all the hybrids was a head that was predominately white with variable amounts of black overlying the general pattern.

How such a hybrid would come to be created in the wild is a matter of speculation. The hybrid observed at Beaverhill Lake did not have any leg-bands or other markings which would have suggested possible escape from a captive breeding situation. Canada Geese nest regularly in small numbers within or adjacent to Snow Goose breeding colonies (T. Barry Can. Wildl. Service, pers. comm.). Competition for nest-sites in mixed colonies may lead to interspecific egg dumping and mixed clutches, which have been observed by Prevett and MacInnes (1973). The goslings may become imprinted on the wrong species-specific characteristics. Mate selection in Lesser Snow Geese (*C. c. caerulescens*) has been shown to be guided by the colour of the family in which the young are raised (Cooke 1978). Therefore, a gosling of a different species may ultimately select a mate similar to its foster parents. Cooke also noted that some of the Snow Geese mated with birds of different colour phase than that of their parents. Interspecific mating may also occur in this way if there is a shortage of conspecific mates.

The genetic, anatomical and behavioural similarities between these two genera are such that occasional hybridizations are possible. There are sufficient differences, however, that a significant hybridization complex such as that found between the Mallard and Black Duck (*Anas rubripes*) is unlikely to develop. Further information on the frequency of intergeneric goose hybridization, particularly in the less well-studied western races, and the circumstances under which species barriers are overcome is necessary before this phenomenon is understood fully. Close observation of large flocks of migrating geese should prove quite valuable.

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43RD FEDERAL-PROVINCIAL WILDLIFE CONFERENCE

by Maryhelen Posey, Director
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- An Overview

In addition to the summary of my notes and impressions of individual portions of the program at this conference, I think it may be helpful to give you a broad view of my impressions of the conference as a whole, especially as it contrasted with last year's.

The first item that strikes me as a veteran of these things is that there is a good deal of difference which seems to be related to the provincial government organizing the conference. This ought to seem obvious, I suppose, but I think I had expected, by the 43rd, that there would be some sort of formula. Maybe there was, and they decided it was stultifying (at a conference I missed), and what I am seeing is a series of experimental efforts. Anyway, Saskatchewan seemed to have sought out a greater diversity of people to contribute, but have lost, in the process, most of the already inadequate time for participants to digest their contributions before having to respond. Oddly, the workshops that work best seem to be those which do not look organized or coherent at all in progress, even to seeming to have digressed from the topic completely! I do not know how this happens, nor whether it is a trend.

The specific quality of the contributors also makes quite a difference, obviously; the speakers spring to mind, but the moderators and master of ceremonies are less obvious. The approach of the CWF representative, Ken Brynaert, was quite different than his counterpart last year, and as moderator of a workshop, quite influential (as see poor Mike O'Shea's comments, I'm sure!). That the CWF people can individually make such a difference, where CNF people do not, indicates how far we have to go, at least in Saskatchewan.

There were more "outsiders" this year - two of us from FAN, two from CNF, fistfulls of planning consultants, industrial environmentalists, and so on, some as specific contributors, some just participating. I took the trouble to try and find out which provinces had invited their naturalists; British Columbia had invited no one, Ontario, Manitoba, and (I believe) PEI had invited naturalist groups, as had Saskatchewan; for the other provinces either no one I located knew who had been invited or no one I located knew whether they had naturalist groups. The Saskatchewan people may be considered to have been represented by Lorne Scott, doubling for CNF, and a few others were there briefly, but they were not a presence as I should expect FAN to be when the conference is in Edmonton. Ontario and Manitoba were either absent or in disguise; I do not really see why. PEI I can understand! Next year the conference is in Ottawa; the Ontario naturalists ought to be stirred up, I would hope, even to putting on a "get together" or running a panel.

The primary advantage of these conferences, it seems to me now, is that they put people and civil servants face to face without the intermediary muddle of politicians. Public hearings, etc., ought to do this, but often fail because they become confrontations. The F-PW conferences are too informal for that, with more diffuse focus than issue oriented hearings. It was especially striking this year to find the civil servants more wary of committing public money than even reasonably commercial and conservative interests among the participants; I think

this may be general.

The other thing that really caught my notice this year which I somehow failed to note last year is that the business of the conference takes place at the recommendations session. The rest is intended, variously, to provide information and stimulate discussion and argument; the recommendations are the official outcome, and reflect the rest only indirectly as a rule. The fact that by the time I got to them, the recommendations seemed tame is surely because it normally takes a few years for an idea presented and discussed in the sessions to be explored back in home territory and re-emerge formalized into a recommendation. For those of us not coping with the process that intervenes, the effect is repetitious and inefficient. It may be inefficient, come to that, but I not longer feel that it is the organization of the conference that makes it so, but the governmental structure it serves (or tries to).

In the summary of the various talks, panels, and workshops which follows, I have put an asterisk beside some reports. These are available for examination at the AGM, and were too long or technical for me to wish to summarize them here. In addition, I have a copy of Mr. Halloran's paper (copies were very much in demand) for interested persons to read. Also tons of literature on public participation methods used in BC and Saskatchewan.

43rd Federal-Provincial Wildlife Conference: Summary

Report of action taken on recommendations of 42 Conference*

Report of US Fish and Wildlife Service; of Canadian Wildlife Service:
Waterfowl Status Report*

Keynote address: Dr. P. Larkin, Dean of Graduate Studies, UBC

Dr. Larkin noted present unrealistic approaches to wildlife management: for instance, maximum sustainable yield estimates are always higher than any species can sustain, all threats to habitat are apt to be treated as equally disastrous. To deal with the future we must realize that though departments of environment are no longer seen as just a fad, land use planning based on environmental issues is too abstract for the average man-in-the street, or for the average man-in-parliament, and prepare to fight very carefully. Some clear methods of evaluating priorities must be achieved, permitting analysis of which habitat concerns may be compromised and which must be fought for absolutely. Environmental impact assessments must put more emphasis on pilot projects, more emphasis on monitoring of what does happen, and involve new research on techniques of mitigation. He feels that the lack of good information on what qualities of habitat are genuinely crucial means that we must be prepared to try lots of things on a small scale.

Especially valuable comments: if hunting rights are supported as a "traditional way of life" but the rifle and snowmobile are a part of the practice of it, then the "traditional" game warden must also be included! We must remind ourselves that land use is determined, in fact, by moral and aesthetic values and economic considerations merely determine the means to the ends so determined; our moral and aesthetic values are what we must in fact defend. Given a $600 million salmon enhancement program for the west coast in Canada, why are we not out screaming for a $600 million wildlife enhancement program?

Panel on benefit of wildlife habitat to society:
Land use planning and economics: Gary Runka, G.G. Runka Land Sense Ltd.

Education of the public in general is crucial; function of habitat to preservation of wildlife must be properly communicated. Broader recognition must be fostered that managing for one species is detrimental to another, and that diversity itself is valuable. To do the education, and to plan, efficiently, we must have good habitat and wildlife inventories, which are not available.

Forestry: Jim Perkins, Prince Albert Pulp Company

I found it odd that a forest consumer should represent foresters; so did some of the foresters present, I gather. This oddity should apparently be attributed to the Saskatchewan wildlife people.

Mr. Perkins noted that all the land with which he deals is wildlife habitat and identified his primary responsibility to maintain harvestable forest in perpetuity. He claims to regard wildlife and habitat as basically interchangeable facets of the same thing; noting such habitat retention practices as leaving stream and lakeshore uncut, restricting sizes of clear-cut, noting special areas as sensitive and leaving them, and reforesting quickly, he does not apparently recognize that some of this amounts to selection of a new habitat rather than retention of the existing one. He argues that most animals can tolerate careful timbering, though some do not; almost certainly his knowledge extends very little beyond big game animals in this respect.

Naturalist: Jim Butler, Alberta Recreation, Parks, and Wildlife

Mr. Butler summed up the history of the wildlife management as directed to specific, usually consumptive, human use. The very largely urban population of today, and the (strange!) fact that most endangered species are not game animals, require that social and cultural aims predominate, with programs designed for non-consumptive use.

I regret to say that I found this talk a motherhood approach.

Landowner: Dr. Boyd Anderson, Saskatchewan Association of Rural Municipalities

Dr. Anderson sees yet increasing specialization in agriculture, with increased size of farms and farm equipment, which imples still greater destruction of wildlife habitat unless special care is taken. His view of what the landowner wants in return for maintaining habitat is simple: some privacy, some funding available to offset costs, and recognition of the public value of his effort to keep habitat. His defense of wildlife habitat is basically that which Dr. Larkin advocated: wildlife is good for the soul; it gives us a sense of continuity which we will otherwise lose.

Workshop of this topic: I attended one of Land use planning and economics

First we identified some benefits of wildlife: national image, tourism, soil and water conservation from habitat, early warning of pollutants, research values, good for the soul. The last was wholehearted, the earlier list rather defensive. Disbenefits were seen as nuisance and cost to other land users, danger. It was noted that often we want someone else to preserve a species (e.g., Siberian Tiger).

The foresters present commented that if Mr. Perkins was exemplary, a very great deal more could be done toward adequate habitat management within other land uses if existing knowledge were made more available to users (not just timbering, but agriculture, etc., too).

Reiteration that recognition and some compensation is required for the landowner who maintains habitat; various possibilities were mentioned. Recognition was given that the wildlife are rarely the problem, but people are, and that "supervision of the public using private land is inadequate in some parts of Canada!" The possibility of enforced habitat zoning was seen as possibly realistic (for the first time, I believe, in this setting) and a recommendation that wildlife agencies support (financially) the efforts of non-consumptive user groups (like us!).

Panel on land use ethics and public involvement
Land use ethics: Mr. Webster, Acting Deputy Minister, Sask. Dept. of Agriculture

Mr. Webster wished to convince us that nature is not all sweetness and light, that things are better in Saskatchewan now; we don't allow grass fires and since there are no more buffalo, they no longer drown by the thousands in spring floods and go to waste!

This talk was possibly the most valuable of the conference, because it made everybody mad! The whole thing might have gone all week being polite and general and repetitive, but all of us lost most of our sense of restraint *vis a vis* Mr. Webster, even staid CWS types!

Public involvement: Andy Russell, Foothills Protective Association

He gave a general description of the ways in which farming and ranching can be carried on while attending to the maintenance of wildlife habitat, and a very clear exposition of the kinds of "lack of supervision of the public" which leads to the necessity of forming such groups as FPA to supply the lack.

Public involvement: Mike Halloran, public information specialist, BC Dept. of Fisheries

That was an excellent shredding of Mr. Webster's talk, with current statistics on the overall destructiveness of soil capability of modern agricultural techniques, pointing out the appearance society gives of thinking that there is yet another untouched hemisphere to be exploited when this one is dead. He insisted that good cost-benefit analysis on agriculture might actually show that using grazing buffalo herds was more efficient use of the land, even for purely human ends.

He gave a detailed discussion of how public involvement at an early stage can be made to work; most of the long-term experience comes from the Oregon Coordinated Land Use Planning Program (brochures available from Mr. Halloran), though the method is now in use in BC. The need, he thinks has been felt in BC before the other provinces because, though there is a great deal of everything in BC, there is a great deal less of anything than there are groups to use it.

Workshop on land use ethics and public involvement: I was in one of the land use ethics sessions

The first session came up with, maximum productivity over longest time; ours came up with, irreversible decisions require maximum care in the making. This last became one of the reiterated themes of the rest of the conference.

The public involvement sessions came to very common conclusions: the historical commitment to private decisions about private land must be curtailed (as it has long been in urban areas); earlier involvement is essential; the approach should be to put facts, as accurate and complete as possible, into public hands, and let decision follow; make maximum use of educational opportunities of all kinds. Interestingly, the second session also made quite a point of the need to educate

the public that there are land use ethics and not to pussy-foot around about trying to hand out the ones we (wildlife types) think best.

Panel on Funding Wildlife programs - Who pays?
Mr. Robbins, Minister, Sask. Dept. of Revenue, Supply & Services, Government

Unfortunately, the Saskatchewan government was having a reorganization during this week, and Mr. Robbins was neither able to attend, nor given enough notice to brief an alternate.

Dr. D.J. Clements, Senior Environmentalist, Syncrude Canada, Industry

He was a bit over-optimistic about reclamation from extraction of non-renewable resources, and rather more inclined to assume that the benefits of society of preserving or restoring habitat can be expressed in dollar figures for comparison with costs. However, he was clearer than most participants in reminding the Conference that habitat may best be viewed dynamically, and that preservation which immobilizes habitat change may not only be excessively expensive but detrimental to wildlife in the long run. He pointed out the lack of good data to permit this kind of progressive analysis, and also to permit EIAs to distinguish clearly between temporary disturbance of habitat and the long-term effects of that disturbance on wildlife populations.

Mr. D. Morrison, Ducks Unlimited, Interested Organization A

Mr. Morrison's talk remined me, as a few other things had, that the problems of Alberta are far removed from those of some other provinces; he commented that ordinary good land management (as in farming) should be adequate to protect wildlife except for waterfowl - clearly he did not have the grizzly in mind! He also gave some evidence of not understanding the landowner's problems clearly: he suggested landowners might be allowed to charge fees to hunters or even birdwatchers - where of course they may do so at will, but this could only increase the hassle.

Professor Ian McDougall, Canadian Wildlife Federation, Interested Organization B

Professor McDougall gave a synopsis of the law of possession of wildlife; same as last year (i.e., same in English and French, I gather!), but expanded to include the philosophy behind it: a principle of abundance, of wildlife costing more (in destroyed crops, etc.) than it benefits. No longer, he pointed out, appropriate. He also pointed out the incredible losses of habitat associated with urban sprawl and industrial development, often ignored in favour of concentrating on the farmer and hunter. As part of the solution, he favours government subsidy of most wildlife users, except harvester-users (like commercial fisheries), the less consumptive user more heavily subsidized, and the development of the concept of a public trusteeship for wildlife.

Mr. Lorne Scott, Canadian Nature Federation, Interested Organization C

Mr. Scott noted the lack of coherence in government policy: wildlife programs set up to preserve wetland competing with agricultural programs to drain sloughs, etc. He urged the development of a wholehearted government voice on habitat preservation. In addition he commented on the need for educational programs to communicate that a thing need not be considered waste just because it is undeveloped. And (thank heaven) he extended his concern for habitat preservation beyond waterfowl.

Summary of Panels and Workshops: Dr. W.A. Fuller, University of Alberta, Edmonton

Dr. Fuller argued that wildlife management is an art, and that habitat preservation must be justified on moral and aesthetic grounds. We must avoid thinking that we can improve on the habitat-wildlife relationships which have evolved, and recognize that any change in habitat management will have secondary effects, which we can expect but not always predict. It is true that historically the custodial land ethic has been a minor theme; we must nonetheless continue to promote the minor theme.

We must learn to recognize that by existing we all utilize, and hence exploit wildlife, since we depend on products which are produced at the cost of wildlife and habitat of some kind. Given this, all land ownership must come to be seen as stewardship, a heritage for all posterity, not merely a few generations. When a landowner affects wildlife directly, he is acting in the "system of the commons," in which his freedom of operation has always been more limited than in the system of private enterprise. What must be done is to extend this interpretation to the habitat as well as the wildlife - perhaps through a public trusteeship. This is not unprecedented: it merely puts habitat in the same category as mineral rights - reserved to the Crown.

In dealing with people who benefit economically from habitat destruction we must indeed use economic arguments - but we should claim the benefits of inflation. Properly inflated costs of rehabilitation can offset a great deal. The costs of habitat destruction, allocated properly to those who benefit, will support a great deal of habitat preservation, also.

Reiterated: the qualitative argument, wildlife and its habitat must be preserved because this is good, is always the strongest, because it is unquantifiable and must be argued as a whole.

Toxic chemicals and wildlife: Dr. D. Peakall, Wildlife Toxicology Section, CWS

The function of this section is to provide a data bank and a source of new research.

Dr. Peakall raised two primary concerns: Spruce Budworm spraying and destruction of habitat by herbicides. In addition he expressed himself as inclined to think that his division, and to a lesser extent CWS, ought to regard their principal function as preservation of the existing diverse gene pool, which is under substantial threat from chemicals of high mutagenicity - this would include virtually all powerful carcinogens.

Report on the Bonn Conference: Mike Robertson, Western Region, CSW

A treaty which is unacceptably difficult for nations such as the US and Canada which share large wildlife populations across international borders has unfortunately achieved sufficient signatures to go into effect. It will not affect Canada directly, who is not a signatory, but this will end further efforts at large scale international wildlife treaties for some time.

Recommendations

Most of these were not of strong immediate interest to FAN, though they were handled with considerable efficiency this year (thank heaven!). The one of most interest to me is one which directs a committee to look into the pragmatics of all the alternative sources of funding for habitat preservation which have been so extensively discussed now, with a date (!) for reporting back.

THE FORTY-THIRD FEDERAL-PROVINCIAL WILDLIFE CONFERENCE IN REGINA, JUNE 26-29, 1979: A REPORT AND MY IMPRESSIONS

by Michael D. O'Shea
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I attended the first three days of the conference, missing the two final days only. I should note that this was my first experience with a conference such as this and as a result, I acted the part of an observer more so than I may have preferred. However, I learned a great deal from the conference and obtained useful insight into the attitudes and characters of the government and non-government officials which respresent wildlife in our country. All in all, I was not impressed with the attitudes of most toward naturalist and conservation groups. I was even told directly by one official that he felt that non-government people should not be allowed to attend government conferences. There were, however, many who did support our involvement and I might add that they made us feel extremely welcome and valuable to the conference.

The theme of the conference was, "Habitat is the Key," and this theme was approached through an initial Keynote Address by Dr. P. Larkin, Dean of Graduate Studies, U. of B.C., followed by three, 3-hour Panels and Workshops, which discussed the following topics:

1) Benefit of Wildlife to Society
   - How does the landowner feel about maintaining wildlife habitat on his land?

2) Land Use Ethics - Public Involvement
   a. Land Use Ethics
      i) Man's responsibility for the land he uses
      ii) Landowner incentives to maintain wildlife habitat.
   b. Public Involvement
      i) Is there a need for public involvement?
      ii) Evaluation of existing programs, if any.
      iii) Recommendations for new initiatives.

3) Funding Wildlife Habitat Programs - Who Pays?
   a. Who should pay?
   b. What cost is acceptable to ensure funding of habitat programs?
   c. What about the user pay concept?
   d. What new initiatives are possible?

The first panel was composed of four speakers: a Land Use Planner and Economist - Mr. G. Gary Runka; a Forester - Mr. Jim Perkins; a Naturalist - Dr. Jim Butler; and a Landowner - Dr. Boyd Anderson.

Mr. Runka feels that land use planners and landowners have begun to gain a better appreciation for wildlife habitat. He offered a number of reasons for wildlife's continuing defeat in spite of ever increasing trade-offs. He feels we still don't fully understand habitat or land use planning. When land use planning, government agencies have difficulties in recognizing the continuum of land and water until the public reminds them. Arguments among habitat developers usually develop since each is favouring his own species. We in Canada do not have an adequate habitat information system, such as proper wildlife inventories. Thus, we have no basis upon which to plan or to defend wildlife habitat. We have been

unable to put a price on wildlife or habitat which is so important in our logistically based economy. There are no economic incentives to protect or develop habitat. There is no revenue generated to entice public or industrial interest. Landowners and government share the cost of habitat protection and development. He also discussed the increasingly growing need of Urban Centers to have open spaces nearby and within cities. This has created a problem for wildlife habitat conservation as open space has become a required part of city planning. Urban centers are, as a result, gobbling up greater pieces of rural land. Habitat development must receive active support to be effective and participants must be present continually to ensure the ball keeps rolling.

Landowner vs Wildlife Habitat - Mr. Runka feels that landowners will cooperate fully providing there is no economic detriment to himself. In a concluding statement, he cautioned that habitat development must be done quickly before it is too late.

I was impressed with Mr. Runka's speech and support his statements above. I feel that his ideas came out at a strategically important time in the conference and may have influenced some of the thought for the remainder of the conference.

The second speaker, Mr. Perkins, felt that the forest industry feels an obligation to reclaim used areas into as good or better condition as before. Steps used to minimize an immediate effect on wildlife are:

- uncut areas left around lakes and streams
- limiting the size of clearcuts
- avoiding known sensitive areas
- immediate reclamation

He felt that it is impossible to prevent immediate problems to wildlife, but believes that wildlife returns very quickly after harvest. He suggested that the best policy is to continue the present careful logging procedures and considers wildlife as one of their major responsibilities.

The third speaker, Mr. Butler, gave an extremely strong and well organized presentation on the role of interpretation in understanding habitat and wildlife.

He suggested that human benefits from wildlife can no longer be based upon game limits but that non-consumptive uses of wildlife have become predominant in our society. With the ever increasing stress of urban existence, its occupants are depending more and more upon rural areas to escape from the city. These rural areas have come to serve a second important function other than agriculture, that of recreation. Urban people expect to see wildlife when they go to the country, even when the city looms in view. He suggested that wildlife is important for relieving the mental stress of urban life. Mental relief has been shown in mental patients on the appearance of wildlife. Public has demonstrated a preference to non-game species. Game operations can adversely effect non-game species. Simple observation of wildlife can satisfy people:

- intellectually
- by involvement, forgetting urban living
- by personal accomplishment, for example: Birders' life lists

It has been shown that wildlife observation satisfaction far exceeds satisfaction of one's job and is thus important to the businessman. It is important as well to the Senior Citizen. It develops close social bonds, such as occur in bird clubs. Revenue from outdoor equipment such as bird books is increasing. 770,000 bird guides were sold in North America in one year alone.

Private land is the place where the public is observing wildlife. The public is stressing non-game species. Game organizations are losing support. The private landowner is important for preserving endangered species. Many of these habitats are on private lands.

Mr. Butler suggested 8 major solutions:

1) Province by Province Plans - listing the status of all wildlife within each

province as threatened, rare, etc.
2) Identify Prime Habitats on Public and Private Lands - This will aid developers so that these areas can be avoided.
3) Identify Priority Areas Requiring Protection.
4) Modifications of School and University Curricula - - stressing communication skills and Sociology.
5) Acknowledge the Efforts of Landowners for protecting and providing wildlife habitat and wildlife.
6) Advertise Landowner Involvement in Habitat Development.
7) Advertise Good Wildlife Areas.
8) Involve Social Scientists in Agencies.

He suggested that the Government work more closely with wildlife organizations. He stressed that habitat development must be based upon both a game and a non-game basis. How can the landowner be expected to support non-consumptive wildlife when the government agencies do not consider it important? Mr. Butler also suggested increased public interpretation. More interpretation centres should be provided, and educational improvements in schools should include habitat and wildlife programs.

The fourth speaker, Dr. Anderson, suggested that Society needs wildlife and that this need will increase. However, at the same time, farmers will show increased specializations in time, leading to a decrease in habitat as a result.

He suggested that most farmers are conservationists and take pride in their wildlife. The grain farmer is most inclined, however, to develop all of his land, thus decreasing wildlife habitat. Most farmers expect society to bear some of the cost of wildlife damage. They expect people to respect their ownership of wildlife habitat. Most landowners believe that Society should assume responsibility for conservation and development of wildlife habitat since it is the public who uses it. Some feel that farmers should be compensated for conserving habitat.

On Wednesday afternoon, the second panel was made up of three speakers: Mr. A.J. Webster, Acting Deputy Minister, Sask. Department of Agriculture - spoke on Land Use Ethics; and Mr. Andy Russell from Waterton, Alberta and Mr. Mike Halleran, Public Information Specialist, B.C. Dept. of Fisheries, who both spoke on Public Involvement.

Mr. Webster game an extremely agriculturally biased talk in which he suggested that agriculture has not destroyed but instead improved the environment. He cited a number of historical accounts before agriculture. He suggested that Man and cattle are now the environment and are most important.

I found Mr. Webster's talk extremely disturbing, indicating a complete lack of any knowledge whatsoever of wildlife or the natural environment. He considered developed agricultural land as wildlife habitat and cattle as wildlife. It disturbed me that such an education is lacking in a man of his important position, a position governing so much influence in Saskatchewan government policies. My disappointment appeared to be shared by most of the audience.

The second speaker, Andy Russell, reported that urban sprawl is using up rich agricultural land. He added that we do not own land, we only make use of it. We, then, have a responsibility to maintain it. We must work with Nature, not redirect it. He suggested the use of more public hearings. He concluded by giving numerous examples of how groups can influence the government.

The third speaker, Mr. Halleran, immediately lashed out at Mr. Webster's speach with cunning proficiency and proceeded to point out the disastrous effects agriculture has had on wildlife and wildlife habitat. Mr. Halleran suggested that farmers are becoming careless in their attempts to increase production. However,

production is still decreasing. He suggested that agriculturalists are manufacturin deserts. Agri-business is the greatest threat to agriculture. We cannot solve biological problems with technological solutions. He suggested that the near extinction of the Bison may have been the result of agriculture more so than hunting

He concluded by stressing the importance of public involvement. He suggested involving the media since this avenue ensures that the public will be informed.

My Impressions:

I was not able to attend the Thursday sessions and as a result I must comment on the first two days only. In general, as I mentioned before, I was not impressed with progress made at the conference or with the attitudes generated. I felt that the first two days were basically wasted, involving only continuous discussion of the problems but with little emphasis on solutions or how to implement them. Very little new data or ideas were presented and thus provided little opportunity for the audience to react or comment. Due to time shortages, the audience-panel question periods were extremely brief and as good as non-existent. A question period often serves to stimulate the audience and results in constructive criticisms. However, time did not allow this to occur at the conference. I should note, however, that I was later informed that the last day's proceedings were much more constructive than the first two days and much was accomplished. I am disappointed that I missed the last days.

Throughout the conference, two deficiencies were always evident. When discussing private land, most who spoke referred to private agricultural land, but forgot to include industrial land. As a result, most of the solutions were farmer oriented. The second deficiency dealt with Consumptive vs Non-consumptive wildlife. This disparity was clearly evident in a number of speaches and questions. This indicates a drastic need for public education on the importance of non -consumptive wildlife uses.

I was also greatly disturbed by an apparent Naturalist vs Hunter Group Conflict, which was at all times, very evident. Hunting oriented groups such as the Fish and Game Clubs appeared to be very sceptical of Naturalist groups. One of their major concerns is that they feel they have been footing the entire cost of wildlife and habitat conservation. They are unaware of the enormous Naturalist contributions. It is a real shame that our groups, who have very similar goals, can't work together. Combined, we would undoubtedly accomplish much more. Instead, this conflict generates an apparent disorganization on the part of outdoor groups, and undoubtedly has a negative influence upon government officials who view us as little children who can't quit quarreling among ourselves long enough to settle the real important matters. How can we expect them to take us seriously? And through all of this childish nonsense, it is wildlife who loses out in the end. Together, as outdoor groups concerned with wildlife, we must work together at conferences such as this one. These government conferences have been and still are hesitant about inviting outdoor groups to participate. We must show that we have our act together ahd have something real solid to offer.

Editor's Note: Although we are usually represented by only one member at this annual conference, we were fortunate in having two present this year. As the impressions of these two members differed somewhat, we thought the accounts of both might interest our readers. Normally we shall print only one account. - M.K.M.

FAN FIELD TRIPS - STETTLER, SEPT. 22 and 23, 1979

by Andrew Stiles and Don Stiles
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This short report describes where the Stettler hosts led us on the 1979 fall field trips and what we saw. Our general impression of the Stettler area was that one is never far from wildlife habitat in the form of sloughs or aspen groves, making it an ideal part of the province to visit.

Saturday morning, the 22nd of September, started with a visit to the "Town and Country Museum," led by Vera Hansen and Grace Neill. This museum includes both a museum building and an old courthouse in which artifacts and photographs of life in the early 1900's, when Stettler was first settled, are displayed in a clear and understandable fashion. When you visit the courthouse, don't neglect to look in one of the back rooms to see a more modern part of Stettler's history - an eyecatching display by the Buffalo Lake Naturalists, who were formed in 1973.

In the afternoon Wilf Hewlett led the group through the pothole country north of Stettler to Herb Hayes' farm on the northeast shore of Buffalo Lake. The farm is on Boss Hill, a high elevation with a cliff leading down to the lake and with an excellent view.

An Indian archaeological site was visited near the farm.

Later the group went to visit a duck baiting station, where grain is put out to attract ducks away from feeding on farmers' fields. There is, of course, no hunting at the bait station, and this method is effective in keeping down losses from ducks feeding on farmers' crops. There are several of these stations in the Stettler areas.

Sunday's trip, led by Lloyd Lohr, began with a tour of a "Bucks for Wildlife" project at the old Churchill Welch farm on the shores of Buffalo Lake. Lloyd gave us a brief history of the project, which was started in 1973. The farm includes four quarter sections, two of which front on the lake, and all are now seeded to grass. He explained that early in the project holes were blasted to make sloughs for geese nesting sites, but without too much success as they dried up most years. Later efforts have been with pheasants. Male pheasants were released when they were old enough to fly out of specially constructed pens. This allows them to distribute themselves randomly, rather than in a group. A one-hour walk around the farm allowed all members of the group to see a few of these pheasants.

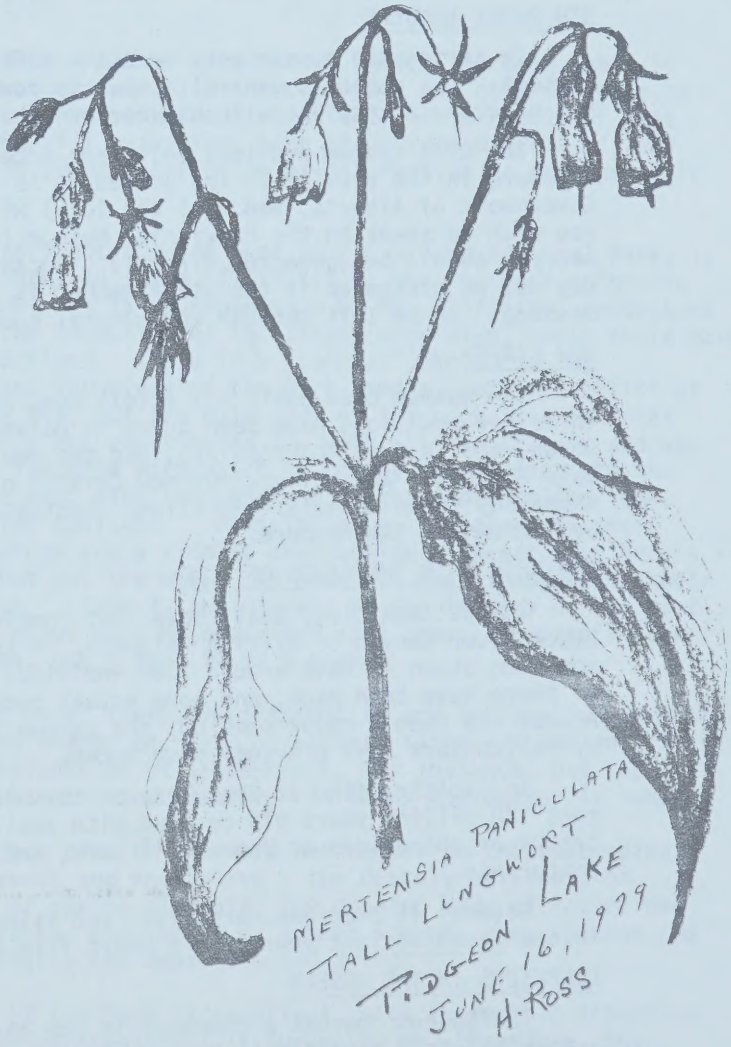
Lunch was eaten at the Narrows, a popular picnic spot on the lake. This is just north of Charlie Bird's farm, and he and Ann Bird joined the group for lunch.

On Sunday afternoon, the group visited a Metis cemetery one mile east of the Content Bridge. The cemetery dates from the 1870's, when the Metis came west to hunt the remaining buffalo (Bison). The tour then went south and east to visit Foxall and Ewing lakes. On the south end of Ewing Lake, large flocks of Snow Geese could be seen at a distance. The next view of interest was on the hill east of McKenzie's crossing (a new bridge across the Red Deer River). Here, one can see for many miles up and down the Red Deer River. The trees were just starting to show their fall colours.

Finally, at 5:00 p.m., the Stettler people went to a natural area on a grazing lease near Big Valley, while the visitors left for their respective homes after a successful day.

Although many of the passerines had already headed south, there were still many waterfowl in the area. A list of birds compiled for the Stettler area for the weekend by the senior author totaled 55 species, as follows:

Great Blue Heron - 2
Canada Goose - several flocks
White-fronted Goose - several flocks
Snow Goose - flock on south end of Ewing Lake
Mallard
Gadwall
Pintail
Blue-winged Teal
American Wigeon
Redhead
Canvasback
Bufflehead
Ruddy Duck
Red-tailed Hawk
Swainson's Hawk
Marsh Hawk
Merlin
American Kestrel
Ring-necked Pheasant
American Coot
Killdeer
Black-bellied Plover
Common Snipe
Greater Yellowlegs
Lesser Yellowlegs
Short-billed Dowitcher
Long-billed Dowitcher
Marbled Godwit
California Gull
Ring-billed Gull
Franklin's Gull
Rock Dove
Mourning Dove
Least Flycatcher
Bank Swallow
Barn Swallow
Black-billed Magpie
Common Crow
Black-capped Chickadee
Long-billed Marsh Wren
American Robin
Swainson's Thrush
Mountain Bluebird
Water Pipit
Cedar Waxwing
Starling
Orange-crowned Warbler
Yellow-rumped Warbler
House Sparrow
Western Meadowlark
Yellow-headed Blackbird
Red-winged Blackbird
Brewer's Blackbird
Dark-eyed Junco
Song Sparrow



PROVINCIAL MUSEUM NEWS FOR NATURALISTS (5)

by David A.E. Spalding
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Events at the museum have been happening so thick and fast there has been little time to write about them, and this is the first 'news' since 1977!

A NEW MINISTER

The Provincial Museum of Alberta is part of the Department of Culture of the Government of Alberta. The Department this spring welcomed a new Minister, The Hon. Mary J. LeMessurier, who enjoys the countryside, and takes an interest in natural history matters. The Minister's office is at 402 Legislative Building, Edmonton, and her phone is 427-4928.

NEW PHONE NUMBERS

In spring the museum went onto the RITE system, and has entirely new phone numbers. The museum's general number is now 427-1730, and each staff member is now directly accessible with his/her own phone number.

The RITE system provides toll-free access on Government (Museum) business anywhere in the province. The procedure is to check the local phone book under Government of Alberta, and dial the local RITE number. Explain to the operator you wish to speak to the Provincial Museum (or a specific staff member there), and you should be connected directly. Because the numbers now ring directly, they may not be picked up if the staff member is in the field or on vacation. However, messages can be left through the general number above.

NEW STAFF

The museum once again has a full complement of staff in natural history. Three new positions have been added in palaeontology; an assistant curator (Jeff Doran, who is a palaeobotanist), and two new technical staff, Gilles Danis and Dale McInnes. In zoology, our new Curator of Ornithology is Philip Stepney, and mammalogy technician is Anne Allen. Habitats has a new technician, Terry Thormin, well known to FAN members.

FOOTPRINTS IN THE SANDS OF TIME

The palaeontology staff have just completed a fourth field season in the Peace River Canyon of British Columbia. A known dinosaur footprint locality has now been shown to have around 1000 individual tracks. Casts of many of the best of these have been made, and some actual pootprints extracted using rock saws. Access has been a major problem; the canyon is full of rapids, and only jet boats or helicopters have provided easy access.

An exciting find at the close of this season was a slab of ripple-marked rock 120 million years old covered with small tracks. These closely resemble the tracks of shorebirds at Beaverhill Lake, and may in fact be the oldest known bird footprints.

Several TV programs, articles, and films are in process; an article appeared in the Canadian last year, and a short film has been completed.

COMPUTERS IN THE MUSEUM

The museum now has a computer in the basement - as an artifact! It also has a terminal to a computer in Ottawa, providing on-line access to an increasing file

of data on Canadian museum collections. Initially birds are the most complete file. Access may be had to this data resource through the Curator of Ornithology.

Another data file was started in 1978, which holds the data from the animal record cards accumulated at the museum.

NATURALIST'S GUIDE

Final editing is now completed, so that the publication should be able to appear next year. The final product should be a book on the same scale as Birds of Alberta, well illustrated, and attractively produced.

NATURALISTS' BOOKSHELF

Island Forest Year ELK ISLAND NATIONAL PARK

1979. Deirdre Griffiths. University of Alberta Press, Edmonton. 257 pp. Hardcover $12.50

Nature writing is very much a matter of personal choice; to some there is nobody like Edwin Way Teale; others are glad there is not, and others prefer to experience the outdoors rather than read about it at all. I am confident that there are very many people who will enjoy this book of Deirdre Griffiths', and find in it common ground, with added description or information to enhance their own enjoyment.

But this book is definitely not a guide book to Elk Island National Park; it really isn't even about the Park, in spite of its title; the somewhat enigmatic subtitle is closer to the mark. It is an expression of Ms. Griffiths' encounters with wild things, and (with the exception of the larger ungulates) these could have been anywhere in the aspen parkland. There is a thumbnail sketch in the Introduction of the history and structure of the Park, and a useful checklist of the plants and animals at the end, but the main body of the book is a personal account of nature as the author has experienced it, with all her senses, and she has used vivid and arresting language with which to convey her feelings to the reader - '- a cranefly drifts past with its paddling flight and dangling legs, caught in a streak of accenting sunlight.' Damselflies - 'In aggregate their darting bodies and glinting wings are a kinetic abstraction.' Great blue herons - 'So near that they seem to shut out the whole sky and pull everything under their dark, rustling cloaks of wings.' This is reminiscent of the imagery of the poet Housman - in fact, this book might best be described as a poem; it doesn't scan and it certainly doesn't rhyme, but I hear it as a poem.

In between verses, as it were, there are interesting and informative comments about insect ways, plant forms and so on, with occasional slips - I wouldn't trust either her spelling or her explanation of iridescence, for instance, but that reminds me of a mistake in a handknitted sweator - it shows the author is human.

The fabric of her work uses time as the warp and weaves on the succeeding seasons a pattern of minor events and encounters - the deathly stillness of winter, the thaw and arrival of spring migrants, the opening buds of leaves and flowers, the emergence of insects, the impact of summer storms, the ripening and fledging and maturing, and finally the departure and dying.

The general workmanship of the book is excellent, with incredible attention to detail and the most careful phraseology. It surprised me, therefore, that Fahrenheit units should be used in a Canadian book published in 1979; several

times the author ignores the national acceptance of the Celsius scale and refers to such figures as 'below Zero' or 'plus 35' in an obviously Fahrenheit context without so much as mentioning the scale.

The drawings, all done by the author, are meticulous, and in keeping with the general high quality of the production. I personally am not fond of the shape and layout chosen by the publishers - the book is awkward to hold, and leaves much blank space on each page (save a tree?) but many will no doubt disagree.

And finally: - 'Fingers of shadow claw forward, lengthening, choking off the life of the sun, quenching all colours but the copper fires of the willows smouldering in hollows.'

- Lois Fenna

RECENT PUBLICATIONS ON THE NATURAL HISTORY OF ALBERTA

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by David M. Ealey and Martin K. McNicholl

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FAN NEWS

Plant Phenology - Plant phenology forms for 1979 data were due in November. If you have not yet sent in your data, please forward your forms to Dr. Bird immediately. The 1979 report will be published in the supplement containing research projects, as was done last year. - C.D. Bird

PROGRAM FOR CAMP CAROLINE

Friday 25th January 1980

7:00 p.m. onwards: Registration

Saturday 26th

9:00 a.m. Breakfast.
10:00 a.m. General Assembly of Annual General Meeting
Reports of officers.
11:00 a.m. Short Field trip.

12:30 p.m. Lunch.
1:30 p.m. Field trip.
1:30 p.m. Directors meeting.

5:30 p.m. Supper.
7:00 p.m. Guest speakers:
Doug Culbert, Wildlife Development Biologist, Bucks for Wildlife Fund.
Albert Lees, Biologist administering a pilot habitat project in the Red Deer Country.

Sunday 27th

9:00 a.m. Breakfast
10:00 a.m. Field trip.

12:30 p.m. Lunch.

Sunday 27th continued

1:00 p.m. Guest Speakers: Dr. Martha Kostuch and Richard Gehrke, founders of the Alberta League for Environmentally Responsible Tourism.
3:00 p.m. Lodge must be vacated.

Cost for the Weekend

Husband or Single Person	$38.50
Wife	$33.00
18-21 year old	$33.00
13-17	$27.50
8-12	$22.00
3-7	$16.50
0-2	Free

Space is limited, so please register early. December 30th is the latest date for accepting reservations. FAN requires a $10.00 deposit per family. Please make out your cheque to Federation of Alberta Naturalists, and send to Box 1472, Edmonton, Alberta, T5J 2N5. Accommodation will be dormitory style; bring a sleeping bag and pillow, plus a bathing suit if you intend to use the indoor pool.

- Dorothy Broadbent

September Cover, Alberta Naturalist - Readers may well be confused as to the artist of the September cover. Bruce J. Milner had drawn a cover to illustrate his article on lichens, but the printers lost it. The editors were unaware of the loss until the rest of the issue had been printed. Helene White came to the rescue at the last minute, sending a new cover to the printer by taxi! Unfortunately neither Bruce nor I had photocopied the cover, although we had talked about doing so. Editorial policy will henceforth be to photocopy the cover and give the copy to the printer. We will retain the original until the issue is printed, then return it to the artist. Sincere apologies to Bruce, and many thanks to Helene. - M.K.M.

BY-LAWS CHANGES

The Board of Directors propose a change in the FAN by-laws to permit more efficient operation in Federation affairs. In summary, the duties of the secretary would be limited to those directly concerned with meetings of the Board, with more time consuming duties, especially those which are made difficult if the secretary does not live in Edmonton, delegated to a clerical assistant hired for the purpose.

This change, laid out below, will be taken up at the Annual General Meeting:

BY-LAWS

2. The Board of Directors

(a) through (m) remain unchanged

(n) change to:

The Secretary shall keep detailed records of the actions of the Federation and minutes of all meetings. The Secretary shall make it possible for the President to perform his executive role, and provide assistance to the President whenever requested.

Copies of the By-laws can be obtained from most directors.

- Harvey Gardner, Director

Elk Island Books and Prints - FAN has several copies of Deirdre Griffith's book, "Elk Island National Park," for sale at a discount to FAN members or members of corporate clubs. This lyrical introduction to one of our smallest national parks is sure to be of interest to many naturalists. Copies may be purchased from "Federation of Alberta Naturalists, Box 1472, Edmonton, Alberta T5J 2N5" for $10.50, plus postage and handling $1.00.

There are also copies of a series of prints that have been produced from pictures in Deirdre's book. These are also available to FAN members at a discount. Each print costs $2.90, including postage and handling. They can be purchased through the same address or from your FAN director. (Note: see the review by Lois Fenna in this issue. Members of the Edmonton Chapter of N.P.P.A.C. may also purchase the book at the same $2.00 discount from Elly de Jongh, Secretary, Edmonton Chapter, N.P.P.A.C., 13715 - 101 Ave., Edmonton, Alberta, T5N 0J8 - M.K.M.)

- D.M.E.

Corrections to September Alberta Naturalist - Jim Salt has pointed out that we used an old name for the genus of Black Bear in his amphibian paper in the September issue. The current name is *Ursus americanus*, not *Euarctos americanus* (p.133). Also, plate 1 in the same article should have been credited to Dr. Victor Lewin.

- M.K.M.

FAN Brief RE: Proposed Phillips Pass-Langdon 500 kV transmission Line, Calgary Power Ltd. Application No. 780709

The Federation of Alberta Naturalists wishes to express its concern that any decision concerning approval of the Phillips Pass-Langdon 500 kV transmission line take into account, in its choice of route, the potential effects on natural areas in the province. A number of items concern us.

Although visual impact is of less concern to us than some other potential problems, it is worth noting that visual impact has less to do, in our view, with the number of people who are in a position to see the transmission line than with the degree to which it is a disruptive element of the view when it can be seen. A very large number of people would see the line along Highway 2, compared to those who would see it on the most western possible route, but along the highway it would be one of a number of similar, man-made features, whereas in the foothills areas it would have a greater genuine impact, standing out very distinctly from its surroundings. In addition, people on or near the highway anticipate such visual elements, though they may not appreciate them, but those who travel off main roads, or any roads, are actively seeking isolation from such artifacts and are likely to be more distressed to find them dominating even a portion of the landscape.

The eastern route proposals include two possible sites close to Frank Lake, a well-known migratory bird area. Of the two proposals, the eastern-most is clearly preferable, and it may be that it is situated so that, with care during construction, danger of disturbance of these waterfowl will be insignificant. If this is deemed to be so, and this alternative approved, we would hope that steps would be taken to ensure that the necessary care in scheduling of construction is actually taken.

More difficult to assess are the hazards involved in the selection of the more western routes. It has been pointed out that elk, deer, and sheep habitat are affected by substantial portions of the proposed foothills routes. Several possible difficulties have been raised: displacement and stress due to spring

construction, increased vulnerability due to tree removal, increased human access, loss of winter range, and noise effects.

Calgary Power Ltd. propose to avoid construction during those seasons when the animals are in these areas; it should be remembered that inspection and maintenance would be almost equally great sources of concern in this connection.

It is argued that little of the area under consideration is heavily treed, and that in any case, for economy's sake, routing of the line would avoid heavily treed land in any case. This does mitigate the potential damage to herds resulting from tree removal, but also reduces the impact of Calgary Power Ltd.'s suggestion that clearing in dense, over-mature forest would benefit the animals.

Increased human access is a very substantial problem. It is difficult to see how access may be made available for adequate maintenance of the line without making it available for trail bikes, 4-wheel drive vehicles, snowmobiles, and hikers to a greater degree than is presently the case. Where access is possible, experience suggests that only intensive patrolling will limit its exploitation. Physical barricades appear to serve only as a challenge, possibly delaying, but not preventing, access. Private landowners typically find restricting access to their land difficult at best, and it is unreasonable of Calgary Power Ltd. to expect the high costs of the patrolling which would be required to be borne by either private landowners or government agencies, when the problem is essentially Calgary Power Ltd.'s own.

Loss of winter range is a greater problem than is recognised, even in the Environmental Impact Assessment Supplement dated 23 April, 1979. In the report from Montreal Engineering Company included in this volume as Schedule C it is proposed to revegetate areas "of high erosion potential" with native or domestic grasses, for instance. It is unfortunate that the report fails to discuss the difficulty of establishing domestic grasses in these areas, to mention the species of native grasses which might be employed, or to confirm that seed is available for those native grasses; this suggests that only a very cursory attempt at resolution of the problem has been made, and that the strict limitation which exists with respect to the native grasses available for seeding is unknown to those responsible.

Should the problems of choice of appropriate species for revegetation be met, there remains the total lack of consideration of the time required for effective revegetation to occur. Since construction is to be scheduled for summer and early fall, the most optimistic possible estimate of the time required for re-establishment of the vegetation still leaves one winter of reduced food supply. Many of the areas involved are at sufficient altitude to raise questions concerning the accuracy of such an optimistic prediction as would limit this to a single winter.

It is also questionable that only areas "of high erosion potential" are suggested for such treatment. While it cannot be denied that significant erosion would damage these habitats still further, even stable areas will be subject to damage to the vegetation from any practicable construction procedures, and this damage will serve to reduce winter food supplies as surely, if not as greatly, as erosion could do.

Noise effects are difficult to discuss in the light of inadequate research on the reactions of native wildlife to various types of noise. Simply to say that deer and moose, for example, do browse beneath transmission lines leaves

open questions concerning the effects on parturient females and on young, and does not address the voltage of the transmission lines referred to nor the effect of voltage differences on the sound produced.

In this connection it should be mentioned that the figure on page 8 of Volume I is inadequate to any conceivable discussion of noise effects, even on humans, for whose hearing threshold the A-scale is weighted. To include such a figure without any inclusion of other information on the sound expected to be produced by the transmission line (its spectrum, predictability, rise time, duration, and frequency of occurrence, for instance) borders on the misleading.

It would appear that the questions of effects of the western routes on wildlife and wildlife habitat which have already been raised have been dealt with insufficiently in the present proposal. The Federation has many concerns in this area, however, which have not been raised elsewhere and which can be raised only in fairly general terms. The issues previously discussed concern game species and the flora on which game species depend. However, the foothills harbour numerous non-game species and a great deal of flora of little or no concern to the maintenance of game.

Non-game species are not as adequately mapped as the game species, and represent a far greater diversity of needs. Much of the flora at higher altitudes, especially in exposed locations, is extremely fragile, vulnerable to small alterations in environment, and slow to re-establish. Any attempt at monoculture, whether of domestic or native species, in the area affected by construction and maintenance of the transmission line would not only be difficult, but would enhance the damage to the flora already disrupted. The problems of disturbance of habitat, taking this much greater diversity in both plant and animal life into consideration, are of sufficient magnitude and complexity to suggest the advisability of routing utilities in a single corridor, located in an area where so much disruption of native habitat has already occurred that no significant increase in the disturbance can be expected from an additional utility.

This argument would support the eastern route as least objectionable from a naturalist's point of view. The Federation realizes that there are numerous farms in the area involved in this route, many of them with irrigation systems, and would like, at the same time as it encourages consideration of this route, to urge that ERCB ensure proper attention to scheduling of construction and to routing of the line in these areas to least interfere with agricultural activities, and to proper compensation. In this connection, the lack of costing of reorganization of irrigation systems in the section on agricultural impact (Volume III, Schedule I) was profoundly disturbing.

In general, the Federation prefers a very cautious approach to the expansion of power facilities, recalling as we do the dilatoriness of power companies to urge conservative use of electricity; however, should the ERCB find that the present proposal fulfills a genuine need of Albertans for power reserves most readily available from British Columbia, we would urge the adoption of the eastern route, with due attention to the problems of scheduling, routing, and compensation which this route poses to waterfowl and agriculture.

- Maryhelen Posey, Director

PRESIDENT'S PAGE

by Mike McIvor

The Alberta Ornithological Records Committee

The Alberta Ornithological Records Committee was established under the aegis of F.A.N. several years ago to assess and compile ornithological records for the province. From its inception, the A.O.R.C. has been composed of some of the most expert and serious naturalists in Alberta. The efforts of the members of the Committee have been sincere despite the somewhat overwhelming terms of reference under which they have operated.

It would be fair to point out that communications between F.A.N. and the A.O.R.C. have not always been good, nor have relations between the Committee and some individual members of our naturalist community been as worthwile as they could be. The A.O.R.C. has been sensitive to the problems which confront it both in terms of fulfilling its role as originally defined, and in terms of gaining recognition and acceptance from naturalists throughout the province, and a new, more forthright dialogue with F.A.N. is underway in an attempt to resolve some of these difficulties.

It has been a pleasing experience for me to observe the manner in which the A.O.R.C., the F.A.N. Board of Directors and other interested participants are now dealing with this issue. Everyone has forsaken the temptation to blame individuals or groups for whatever problems may have beset the A.O.R.C. Instead, there is a very positive re-assessment process taking place which I am confident will define the role of the A.O.R.C. more clearly, and result in finding a very real place for such a Committee in the life of Alberta's naturalist community.

The Honourable John Fraser, M.P. Minister, Environment Canada

On Sunday, October 21st, a hastily arranged meeting was held at Lake Louise between five members of the National and Provincial Parks Association of Canada, including the presidents of F.A.N. and the Bow Valley Naturalists, and John Fraser, Canada's Minister of the Environment. The purpose of the meeting was to discuss planning for Lake Louise and certain other national park issues upon which Alberta's environmental groups have moved so closely together. But it was also an opportunity for us to size up our new Minister, who now includes Parks Canada amongst his responsibilities.

At the risk of appearing spellbound, I want to assure you that Canada is blessed, temporarily at least, with an Environment Minister who is a genuine, informed and caring environmentalist. However, Mr. Fraser was very candid about the political, economic and philosophical pressures to which he was subject. Our group left the brief meeting knowing that he shared many of our principles and concerns, but that it was up to us to work harder than ever to demonstrate that the values which we adhere to with respect to the land, environment and wildlife are values representative of the majority of Canadians. No small task! But with John Fraser as Minister of the Environment it will be much more worth trying.

The Grasslands National Park

Diane and I spent the weekend of September 29th and 30th in the Val Marie and Killdeer areas of southern Saskatchewan, site of the proposed Grasslands

National Park. We were in the company of members of the National and Provincial Parks Association of Canada and the Saskatchewan Natural History Society who had organized the field meeting to focus attention on the importance of including a segment of native grasslands in our national park system.

We visited several locations in each of the two core park areas and were very impressed with the landscape and abundant wildlife. (Prairie dogs, rattlesnakes and Sage Grouse to drop a few names). It may not be the best grassland area in the country but it is undoubtedly the best available one and will be a worthy addition to our park system.

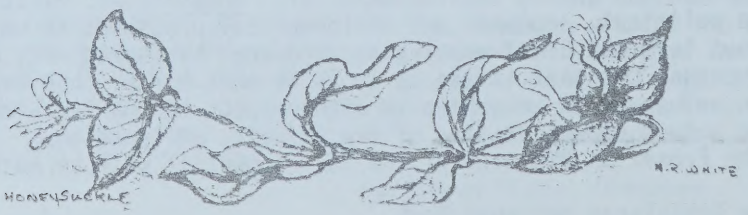
Now for the good news. At our meeting with John Fraser, he was prompted about this park. His response was that "I will get you the grasslands." It was that emphatic and that positive. He is not happy about some of Saskatchewan's conditions, but he is not prepared to delay and risk losing it. I am sure that any letters of support to him on this matter and some of the other issues with which he is wrestling would be most welcome.

Canadian Institute of Forestry

On October 2, Dorothy Broadbent and I travelled to Jasper to spend a day at the annual conference of the Canadian Institute of Forestry, at their invitation. The C.I.F. is the national association of professional foresters and on this occasion had invited a number of outsiders to join them to listen to a series of speakers and then discuss the ideas which were generated. It was a fascinating day for which I thank the C.I.F.

In my observation it was clear that a number of problems were facing those who manage and develop and at times exploit the forest resources of our country. Although timber supply was a recurring concern, I think there was a general concensus - a concensus which even industry representatives could recognize beyond their emphasis on profits - that much better, more intelligent and more sensitive management of our forests is required. Some long term goal setting is necessary but it should be possible to establish systems of forest management which will increase the supply of harvestable timber but will also increase recreational opportunities and enhance the wildlife capabilities of forested land.

Professional foresters, in and out of government, cannot do it alone. We must take every opportunity to convince the loggers and the politicians that proper management must account for the values which we hold as naturalists.



EDITOR'S PAGE

by Martin K. McNicholl

Naturalists in Alberta face a busy few years as we enter the 1980's. First we approach the tenth anniversary of FAN. Part of our celebration of that event will be a special publication outlining the history of FAN and of its corporate member clubs. Many members will be surprised at how many activities in which FAN has been involved, and how widespread and diverse our activities are now. However, FAN has one major fault - far too few individual members. All members can help erase this fault by making other nature enthusiasts aware of FAN and its activities. Corporate member clubs can help by promoting both FAN and our national equivalent, the Canadian Nature Federation, at every convenient opportunity. Anyone with interest in nature in Alberta, and with hopes of seeing nature preserved should belong to CNF, FAN, and their local club, if any. If the naturalist voice is to be heard by governments, we must show that there are many of us.

The role of the naturalist in conservation issues is very important. Many conservationists are merely citizens concerned about pollution, slaughter of wildlife, destruction of habitat or some other issue, but with little or no background understanding about the natural systems for which they fight. Such people play important roles in fighting issues, but often take on a fanatical approach which tends to discredit all conservationists in the eyes of our opponents. The naturalist, on the other hand, approaches conservation issues through the eyes of a person with intimate knowledge of nature, or at least some facet of nature, and is thus much more credible in the eyes of the "opposition." Of course, most naturalists are also conservationists and often belong to important conservation groups, such as the National and Provincial Parks Association of Canada. Nevertheless, the distinction is important, and while FAN should be associated with such organizations as the Alberta Wilderness Association, NPPAC, and various hunter groups, such an association should be loose - we can join forces to fight some issues, but may find ourselves on the opposite side of the fence in others.

Naturalist groups tend to be composed of a diverse mixture of professional biologists, expert amateurs, and novices. This is true even of the major scientific organizations which overlap in interest with naturalist groups. Such a scientific body is the American Ornithologists' Union, scheduled to hold their annual meeting in Edmonton in 1981. This will be another occasion on which FAN will be producing a special publication. One of our Corporate Member clubs, the Edmonton Bird Club, will be handling field trips for that meeting.

Then in 1982, Calgary may be the site of the CNF meeting for that year. More details will be made available when that meeting is confirmed. At any rate, in addition to our usual array of activities, FAN members have special events to which to look forward in the 1980's. We shall be busy!

CLUB NEWS

Bow Valley Naturalists

The Bow Valley Naturalists' fall 1979 program is as follows:

September 26 - Our annual members' night where we view slides from summer trips and renew acquaintances.

October 24 - "Proposal for the development of an Interpretive Program for Sunshine Village." Bob Sandford, consultant in human and natural history interpretation, will outline the interpretive blueprint for Sunshine and present a sample program.

November 28 - "Monashee Mountains - Wilderness for Tomorrow" by John Marsh. Dr. Marsh is Associate Professor of Geography at Trent University and editor of PARK NEWS. He is a member of the Canadian Exploration Group which conducted a scientific expedition to the Monashees in 1978. The program will include a slide sound show and discussion of the research group and the crown land and forest service situation in B.C.

December Bird Counts - We will hold our annual Christmas bird counts in the Banff/Canmore and Bow Summit areas again this year. The dates have not yet been established but will be announced at our weekly meetings.

January 23 - "Keeping Track of Wildlife." John Kansas is a biologist on contract to the Canadian Wildlife Service in Jasper and formerly of the Taiga Biological Station in Manitoba. His program will deal with the biology of animal species in the winter with an emphasis on the interpretation of tracks. A morning field trip the weekend following this program will be arranged later.

- Margie McDougall

Calgary Field Naturalists Society

At our June meeting, a new board was elected with Don Stiles as President for 1979/80 and Mike Rogers as Vice-President.

Our fall/winter programme as usual includes monthly meetings, study nights and field trips, and we are again sponsoring five Audubon films, details of which may be obtained from Mary Lore (289-6453). These films are well worth a visit to Calgary.

We have decided to change the format of our bulletin and make it a quarterly publication. Brief newsletters with information on meetings, field trips, etc. will be sent by first class mail to members in or near the city. We hope this will eliminate missed outings, etc. due to late mail delivery.

Revenue from the sale of the CFNS book, "A popular guide to Calgary's natural areas," has been set aside to be used only for special projects, the first of which is the institution of a school science fair prize in natural history. Copies of this attractive book are still available from the society at the sale price of $2.00.

Calgary City Council is now committed to keeping much of Nose Hill as a park. We are grateful to members of the CFNS Natural Areas Committee who have worked so hard for this cause for years. They are still providing input to the city in the hope of keeping the park "natural" and not over-developed as a recreation area.

A small committee has been formed to look into possible ways of making our observation records more useful to present and future naturalists.

CFNS is pleased to support FAN in the proposal to host the Canadian Nature Federation conference in 1982, and looks forward to hosting the fall FAN meeting in 1980.

- Dorothy Dickson

Edmonton Bird Club

The Edmonton Bird Club meetings take place at 20:15 (8:15 P.M.) in Room 245 of the Agriculture Building, University of Alberta, except for the annual banquet which will be held at the Mayfair Golf & Country Club. The following programs are planned for mid-winter meetings:

November 16: Unveiling of Bob Lister's book, with member's slides from Beaverhill Lake
December 14: Dr. David A. Boag, "Peck orders in Red Grouse and Japanese quail, how are they determined?"
January 19: Annual Banquet, with 2 films by Al Karvonen.
February 15: Steve Brechtel on "Cormorants at Lake Newell."
March 15: Lu Carbyn on "Birds of Namibia and South Africa."

The new executive, elected at the September 21 meeting, are:

President: Dick Dekker
Vice-President: Ron McElhaney
Treasurer: John Young
Secretary: Linda Pilarsky
Audubon Secretary: Graeme Greenlee
Field Secretary: Bob Turner

Directors: George Evans
Otto Hohn
Dave Ealey
Stephanie Proudfoot

The American Ornithologists' Union will be holding their annual general meeting in Edmonton in 1981 at the University of Alberta. Dr. David A. Boag of the Department of Zoology, University of Alberta, has secured the EBC's assistance in helping to plan field trips for this meeting.

The Christmas Bird Count will be conducted on Dec. 16 in the Edmonton area, with Linda Pilarski as coordinator. Rainer Ebel plans to lead a Christmas Bird Count at Lake Wabamun on Dec. 23.

- D.M.E., with supplementary notes from Graeme Greenlee.

Lethbridge Naturalists Society

Our summer programs were a success, and the winter-spring brochure will be prepared soon. Those who think they would like to participate in these outings may write for a brochure to our corresponding secretary, Mary Bailey at 2302 - 20 Ave. S., Lethbridge, Alberta.

Our regular meetings are held on the second Friday of each month in Lethbridge Community College, Room 100 at 7:30 p.m.

The Lethbridge club is grateful to F.A.N. for their donation to the Helen Schuler Memorial Fund, and remind others interested that the fund is still open and receiving donations.

Michael O'Shea, in charge of the Cliff Habitat Improvement Project, reports that last February the Lethbridge Naturalist Society completed 22 holes, fulfilling the requirements of our contract with "Bucks for Wildlife" for the construction of 20 holes suitable for use by falcons or geese. We are pleased to inform Alberta naturalists that two of these holes were occupied this summer by Prairie Falcons, which successfully raised a total of five young. The two nests were

west and north of the city. A Golden Eagle was enticed as well, and built a stick nest upon one of our ledges. Unfortunately this bird was unable to find a mate and was unsuccessful. We constructed our 22 holes in five major areas so as to determine site preferences of falcons and geese. The three areas occupied this summer represent a 60% occupancy success rate. We are delighted with these results and expect an increased occupany next season, as more holes were dug this summer.

- Hazel Ross

Red Deer River Naturalists

At our annual general meeting in September, the following were re-elected to a second term of office:

President: Dorothy Broadbent
Vice-President: Mike O'Brian
Secretary: Doreen MacDonald
Treasurer: Bill Nesbitt

The remainder of the program consisted of members' slides, highlighting summer field trips. A list of natural areas worthy of preservation has been submitted to the heritage committee of the Red Deer Museum. This is to be presented to the city and county councils. A study of the Great Gray Owl will be the subject of the October meeting, and a banquet will follow in November.

- Dorothy Broadbent

NOTES AND NEWS

Flora of the Prairie Provinces

The fourth part of the Flora of the Prairie Provinces is now in press. It is in four fascicles and the first two have already appeared in Phytologia. Fascicle 3 which comprises the *Cyperaceae* was presumably being printed in the last week of April. Fascicle 4 completes the volume and is due sometime next month. The reprint in book form is expected to be available possibly in June or July.

Those subscribers who have moved since part III came out should write to the author or the Blue Jay Bookshop, as the case may be, and advise of the change of address so that their copy of part IV will not be misaddressed.

The few people who have received complimentary copies of part 1 to 3 should write in to the author to claim their free copy of part IV, because the author has not kept full record of the donees and their addresses.

- B. Boivin, author (May 1979)

Editor's Note: Bruce J. Milner has been assigned to review this important work by Dr. Boivin for the Alberta Naturalist.

Jones bands third highest number of species

Once again Edgar T. Jones of Edmonton is congratulated for his outstanding work in banding, this time in the 1978 annual banding report for western North America. Eddie achieved the third highest number of species banded in the region, which includes Alaska, Hawaii, Yukon, B.C., Alberta and the 11 western-most contiguous U.S. states. He was surpassed only by two research institutions: Point Reyes Bird Observatory and the Avian Biology Lab of the University of California at San Jose. Both these have more people and more bird species to choose from, so Eddie's achievement is especially noteworthy, exemplifying the type of work that

won him the Edmonton Bird Club's award two years ago. Eddie banded 3314 birds of 75 species, including the first Nashville x Yellow Warbler banded in the region. Highest totals of species banded by Alberta banders listed in the 1978 report North Amer. Bird Bander 4:82-95, 1979, include: Double-crested Cormorant (Prov. Museum), Broad-winged Hawk (R.W. Fyfe), Swainson's Hawk (Fyfe), Ferruginous Hawk (Fyfe), Marsh Hawk (Fyfe), Gyrfalcon (Fyfe tied with D. Mossop - most, if not all outside Alberta: Fyfe's totals include banding in Yukon and B.C.), Peregrine Falcon (Fyfe), Merlin (Fyfe), Great Horned Owl (Fyfe), Hawk Owl (R.E. Gehlert), Great Gray Owl (Gehlert), Common (Yellow-shafted) Flicker (Jones), Downy Woodpecker (Jones), Great Crested Flycatcher (Ken Trann - 2nd banding and nesting record for region), Yellow-bellied Flycatcher (Jones), Least Flycatcher (Jones), Rough-winged Swallow (Jones, tied with 2 others), Common Crow (Trann), Black-capped Chickadee (Jones), Brown Thrasher (Jones), Red-eyed Vireo (Jones), Philadelphia Vireo (Jones), Black-and-White Warbler (Jones), Tennessee Warbler (Jones), Yellow Warbler (Jones), Nashville x Yellow Warbler hybrid (Jones), Magnolia Warbler (Jones), Cape May Warbler (Jones), Bay-breasted Warbler (Jones), Blackpoll Warbler (Jones), Ovenbird (Jones), Northern Waterthrush (Jones), Connecticut Warbler (Jones), Mourning Warbler (Jones), Canada Warbler (Jones, tied with Point Reyes), American Redstart (Jones), Northern (Baltimore) Oriole (Jones), Rose-breasted Grosbeak (Jones), Pine Grosbeak (Jones), Baird's Sparrow (Jones), Chipping Sparrow (Jones), Clay-colored Sparrow (Jones), and White-throated Sparrow (Jones).

- M.K.M.

Don Gill killed in car crash

University of Alberta biogeography professor Dr. Don Gill was killed in a car crash near Peace River, Alberta, at the age of 44. Dr. Gill was director of the Boreal Institute for Northern Studies from 1973 to 1976. Although not always popular, Dr. Gill was widely respected for his influence in directing many students in ecological research. Most of his research and that of his students was in northern areas outside of Alberta, but much of it was applicable to northern parts of the province. His death leaves a decided gap in northern ecological research.

- M.K.M., based on article in Calgary Herald of 1 August 1979, with thanks to James D. Howell for drawing my attention to the event and supplying the clipping.

The following official announcement has been received recently:

The Department of Geography regrets to announce the death of Dr. Don Gill, Professor of Geography, in an automobile accident near Peace River, Alberta, on Saturday, July 28th, 1979.

Dr. Gill had joined the department in 1968 following the completion of his Ph.D. at the University of British Columbia. From 1973-1976 he was Director of the Boreal Institute for Northern Studies at the University of Alberta. He was promoted to full professor in 1977.

Dr. Gill was an acknowledged expert on northern ecosystems and had published extensively on this and related topics. He had a close degree of familiarity with the Canadian North in all its aspects.

- Ian A. Campbell
Professor and Chairman
Dept. of Geography
University of Alberta, Edmonton

Birdscope

Persons wishing to take advantage of the special offer of a $9.00 subscription

to Birdscope should send their order to Charles Harper, Department of Drama, University of Alberta, Edmonton, Alberta, by 1 March 1980. Details of this offer are published in the September issue of the Alberta Naturalist. Any member of FAN may take advantage of the offer provided that all our subscriptions are entered at one time and covered by one payment. Hence, make your cheques out to FAN, and we will send one combined cheque to Birdscope.

- M.K.M.

1979 - 1980 Christmas Bird Counts

The provincial compilation of this year's Christmas Bird Counts will be handled by Virginia Young, R.R.#1, Busby, Alberta, TOG OHO.

We ask local compilers to forward all data (including names of count participants) directly to her by January 15 for inclusion in the AN.

A summary of the counts will be featured in the March regular issue, and complete tabulations will appear in the spring supplemental issue.

- Virginia Young

Ministik Hills Field Study Centre

Winter activities: - there will be a cross-country ski and nature weekend at the Centre again this season (Jan. 26-27, 1980) led by Bruce Bembridge, champion skier and keen bird-watcher. The pioneer event, held in February 1979, was tremendously successful, in spite of severe cold, thanks to the great enthusiasm of the participants. Book now or enquire to Lois Fenna, RR2, Tofield, Alberta, TOB 4JO (Tofield 662-2280). Full board, primitive accommodation and tuition - $30.

Later in February we shall be holding the popular annual Ministik Challenge Cup - a cross-country ski and snowshoe event for members of the Edmonton Bird Club and Edmonton Natural History Club. This lighthearted contest may take 30 minutes, one and a half hours, be won by a dog, cause the ruin of a decent pair of skis, but has never yet been fatal. Watch for details.

In early May, our first Spring weekend course, on birds, will be held under the leadership of Terry Thormin - this has always been a highlight of our year, for birds, people, and weather; so try to join us in 1980.

- Lois Fenna

Ian McTaggart-Cowan New Honourary President of Fed. B.C. Nat.

The Sept. 1979 issue of the Federation of British Columbia Naturalists Newsletter (Vol.17, no.3) contains the announcement that Dr. Ian McTaggart-Cowan, recently retired Professor of Zoology and Dean of Graduate Studies of U.B.C., has been appointed the Federation's new Honourary President. Dr. McTaggart-Cowan is currently Chancellor of the University of Victoria, and has a long history of involvement in naturalist and conservation organizations ranging from local to international in scope. Some of his earlier research was conducted in the national parks of Alberta, and many others from B.C. have relevance to montane portions of Alberta.

- M.K.M.

Joy Finlay Teaches Course

A University of Alberta pamphlet describes a course taught for the Extension Department by Joy Finlay this October. Under title of "Interpreting the woods and fields/ the grey season," the course is designed for teachers and leaders of children's groups wishing to develop skills in nature interpretation. Further

courses are to be offered in winter, spring, and fall. Interested parties should contact: Faculty of Education, Univ. of Alberta, Edmonton, Alberta, T6G 2G4, or phone 432-5044 or 432-3116.

- M.K.M.

Banff Naturalists Move

Banff naturalists Bruce and Ruth Gordon are moving to Duncan, B.C., according to the Bow Valley Naturalists Newsletter #3 (1979). As Bruce was both Treasurer and Newsletter Editor at the time of their move, and had served BVN as Vice-President also, the Gordons will obviously be missed.

Whooping Crane summers in southern Alberta

Naturalists in Alberta will be interested to learn that a banded yearling Whooping Crane spent much of the summer near Cardston, Alberta. Although known to be in the area by local residents for some time, it was not until W. Garry MacKay in Calgary learned of it that most naturalists were aware of the rarity. MacKay verified the identification, and several other prominent observers from Calgary saw the bird. The October news letter of the Edmonton Bird Club reports that 10 white birds on Beaverhills Lake in April were tentatively identified by Dick Dekker as Whooping Cranes also.

- M.K.M.

The Third Annual International Wildlife Film Festival, (Call for entries . . .)

To encourage the production of high quality wildlife films, the University of Montana Student Chapter of the Wildlife Society sponsored the First and Second Annual International Wildlife Film Festivals. We were extremely pleased with the participation and encouragement for these Festivals.

In 1980, we will host the Third Annual International Wildlife Festival. Amateur and professional films pertaining to wildlife will be judged by a panel of highly qualified film makers and biologists. Winning entries will receive awards, and the results will be internationally publicized.

The deadline for submission of applications and films is February 1, 1980. All entries must have a predominantly wildlife theme and have been produced or released in calendar year 1979. Judging will be held prior to the Festival, and the winning films will be shown in early spring at the University of Montana.

Information, rules of eligibility, and application forms may be obtained by writing: Wildlife Film Festival
Wildlife Biology Program
University of Montana
Missoula, Montana 59812
(406) 243-5272

Entomological Society of Alberta

Dr. H.R. Wong, President of the Entomological Society of Alberta, has written the editor recently in reply to a request for notices of their activities. Dr. Wong indicates that their Secretary-Treasurer will keep us informed of the society's meetings. My request was made as part of an effort to keep FAN members in touch with all organizations whose activities overlap our own - either in nature or in conservation. Obviously a group studying the Animal Kingdom's largest group of animals should be of interest to us. Dr. Wong sent me copies of the twenty-first and twenty-sixth annual meetings, from which I shall prepare a profile of the society for the next A.N. Of special interest to me was seeing the active EBC member Dr. Kay Ball, an ornithologist by training, as the President in 1973! But then her husband, Dr. George Ball, Head of the Department

of Entomology at U of A, attends American Ornithologist Union meetings, so why not? Obviously, both are well-rounded naturalists!

- M.K.M.

Bill Gunn Receives Award

We learn from the summer 1979 edition of the Ontario Naturalist that Dr. W.W.H. Gunn has been awarded an Honourary Life Membership in the Federation of Ontario Naturalists. Dr. Gunn, now a resident of Alberta, is best known in the naturalist community for his pioneering work on recording birds and his resulting many fine records. Professionally, he is best known for his work on bird-aircraft strike problems. He is currently President of LGL Environmental Consultants Ltd., has represented Canada at the International Ornithological Congress, has served on the board of the Cornell Laboratory of Ornithology, and he is a former President of the Wilson Ornithological Society.

- M.K.M.

John Janzen Nature Centre

The John Janzen Nature Centre in Edmonton had a wide variety of "fall-winter" courses offered this past fall. These included fall birding by Rainer Ebel, bird banding by Edgar T. Jones, nature photography, "animal house" (Dealing with studies on game animals), making a backyard feeder, rock hounding, winter birding by Reiner Ebel, and Christmas crafts (instructors not stated for courses where I have not indicated them here). Unfortunately the pamphlet for these courses reached us long after the Sept. issue had gone to press. Persons interested in future courses at the centre should write them at: John Janzen Nature Centre, Edmonton Parks and Recreation, 10th Floor, CN Tower, Edmonton, Alberta, T5J OK1.

- M.K.M., based on pamphlet sent by J.C. Finlay.

Environmental Management Strategies Past, Present, and Future: A Symposium

As announced in the September A.N., the Alberta Society of Professional Biologists plans a symposium entitled "Environmental Management Strategies--Past, Present, and Future" to be held on April 22 and 23, 1980, at the Edmonton Plaza Hotel in Edmonton, Alberta. This Symposium will be co-sponsored by the Alberta Society of Professional Biologists and Alberta Environment.

The symposium will critically examine the conception and birth of environmental legislation, and the evolution of current environmental management policies, and will provide suggestions for future environmental management strategies. Eminent speakers from universities, private industries, and government will be featured.

Conceptual aspects of the topic will be addressed by Dr. C.S. Holling (University of British Columbia), Dr. D.R. Stanley (Stanley Associates Engineering), and Mr. A.D. Crerar (Environment Council of Alberta). Mr. H.W. Thiessen (Assistant Deputy Minister, Alberta Environment), Mr. R.B. Peterson (Esso Resources Canada Ltd.), and Dr. D.A. Thompson (University of Calgary) will provide an Alberta perspective. Dr. A.H. Macpherson (Regional Director General, Environment Canada) and Dr. I. McTaggart Cowan (University of British Columbia) will develop topics concerning the Natural Environment. Factors affecting the Human Environment will be investigated by Mr. L. D'Amour (Private Consultant) and Dr. G. Nelson (University of Waterloo). Dr. V. Geist (University of Calgary) will serve as Symposium Rapporteur and provide a look to the future.

- o Date: April 22 and 23, 1980
- o Location: Edmonton Plaza Hotel, Edmonton, Alberta

o Registration and Further Information:

The Secretary
Alberta Society of Professional Biologists
Box 2824, Postal Station "A"
Edmonton, Alberta
T5J 2G5

April 22-23, 1980 — Edmonton Plaza Hotel — Edmonton

PRELIMINARY PROGRAM:

April 22	
0900	Opening Address - Hon J.W. Cookson, Alberta Minister of Environment
Session I	Conceptual Aspects
0915	Dr. C.S. Holling, Institute of Animal Resource Ecology, University of British Columbia. The non-strategy of environmental impact assessment.
1000	Dr. D.R. Stanley, Stanley and Associates Engineering Ltd., Edmonton. The role of private consultants in developing environmental management strategies.
1045	Coffee
1115	Mr. A.D. Crerar, Environment Council of Alberta. Public involvement in environmental management decisions.
1200	Luncheon (Speaker to be announced)
Session II	Alberta Perspectives
1330	Mr. H.W. Thiessen, Assistant Deputy Minister, Alberta Department of Environment. Alberta strategies for environmental management.
1415	Mr. R.H. Scammell. Barrister and outdoor writer, Red Deer, Alberta. A citizen's look at Alberta Environmental management strategies.
1500	Coffee
1530	Mr. R.B. Peterson, Esso Resources Canada Ltd., Calgary. Environmental management and the Cold Lake project.
1615	Adjourn
1830-1930	Pre-banquet No-host Cocktail Hour
1930	Banquet (Speaker to be announced)
April 23	
Session III	The Natural Environment
0900	Dr. I. McTaggart Cowan. Former Dean of Graduate Studies, University of British Columbia. Results of Canadian environmental management decisons--the past 35 years.
0945	Dr. A.H. Macpherson. Regional Director General, Environment Canada, Edmonton. Federal environmental strategies and the natural environment.
1030	Coffee

1100	Dr. Dixon A. Thompson, Faculty of Environmental Design, University of Calgary. The Oldman River--a case study in environmental management.
1145-1330	Lunch
Session IV	The Human Environment
1330	Mr. L. D'Amour. Private consultant, Montreal, Quebec.
1415	Dr. Gordon Nelson, Faculty of Environmental Studies, University of Waterloo. The Northern Pipeline Panel.
1500	Coffee
1530	Dr. Valerius Geist, Associate Dean, Faculty of Environmental Design, University of Calgary. Symposium Rapporteur and a look to the future.
1615	Closing remarks and adjournment.

- Courtesy of N.A. Roe

CONSERVATION NEWS

Special National Geographic on Parks - Readers who do not subscribe to National Geographic will be interested in reading the July 1979 issue, devoted entirely to U.S. National Parks. Articles cover the historic development of the National Parks Service, types of parks, contemporary problems and solutions, and other aspects. Many parallels can be made with our own parks - M.K.M.

Public Participation in National Parks Planning - In a recent issue of Park News, Pat Kariel examines the influence of public participation on planning Canadian National Parks, with the Lake Louise Visitor Service Centre as a particular example (see Recent Literature section for full citation). Although Mr. Kariel concludes that park values are compromised for tourist and private gain by Parks Canada, the article is of special value in reviewing the public participation program and the type of input by various groups, such as management, public participation staff, and committees. I recommend it to anyone contemplating participation in any of the National Parks hearings in future. - M.K.M.

Sparrow, Starling and Predator-Proof Bluebird Nest Cavity? A new artificial nest cavity for bluebirds is described by Vincent M. Bauldry in Inland Bird Banding Newsletter 1(2):4, 1979. An open mesh top is used to discourage House Sparrows, a technique also described by other investigators. A longer entrance block than used in conventional houses discourages Starlings from entering, but does not discourage bluebirds. Finally, a deeper cavity than used in most designs discourages mammalian predators and slightly delays departure of young bluebirds, decreasing the liklihood they will fledge prematurely if disturbed. We shall watch for success with this new design with considerable interest. - M.K.M.

Recreational Rivers Act Introduced - According to Environment Views 2(3): 28, 1979, Social Credit MLA, Dr. Walter Buck, has introduced a bill into the Alberta Legislature, "to preserve our natural environment for the long-term benefit of all Albertans." No details on the contents of the bill were mentioned. - M.K.M.

Sunlight in Downtown Calgary - In a recent note in the August 1979 issue of a newsletter from the Faculty of Environmental Design, University of Calgary, an anonymous author points out that the low sun angle in Calgary in winter means that tall buildings cast long shadows - up to six or seven city blocks. Yet 30

buildings are under construction downtown with no regard to sunlight. Members of the faculty hope this important feature of the environment will be considered in future planning, and cite the proposed Calgary Civil Centre as a possible ray of hope. - M.K.M.

Future of Cave & Basin Site, Banff - Ailene Harmon reports in the Sept.-Dec. 1979 issue of the newsletter of the Calgary/Banff chapter of the National and Provincial Parks Association of Canada a controversy over the historic cave and basin site in Banff. One proposal has the site reconstructed as a functional swimming/bathing place; another has the site developed as a historic site and interpretive centre showing the evolution and history of National Parks in Canada, with an aquacourt developed elsewhere for recreation. The location of such an aquacourt is also controversial. Parks Canada will be presenting the alternatives at a meeting, to which it is hoped interested naturalists will attend in order to assess the alternatives on this important issue. Meeting date will be announced in the press. - M.K.M.

Chateau Lake Louise and bears

PRESS RELEASE (Monday, September 17, 1979)

"The National & Provincial Parks Association, Calgary/Banff Chapter, applauds the recent move by Parks Canada to charge the Chateau Lake Louise with three accounts of negligent garbage handling, including feeding and enticing bears.

"Again this year grizzly bears frequented the Chateau area almost nightly during the summer months. And as they have done for at least the past ten years, grizzly bears fed freely from garbage stored at the Chateau. As bears become habituated to feeding on garbage in close proximity to people, they can become aggressive and dangerous. Garbage-habituated grizzly bears in Yellowstone and Glacier National Parks, U.S.A., have killed 4 persons since 1967. Similar man-grizzly bear encounters have occurred at Lake Louise. A Canadian Wildlife Service employee was killed in 1973 while relocating a huge, garbage-addicted male grizzly bear. In 1972, a hiker was seriously injured by a grizzly bear while camped less than 10 miles from Lake Louise. A woman was injured by a grizzly bear while she was hiking near Skoki Lodge. Garbage-habituated bears relocated from Lake Louise were thought to be involved in both these cases.

"Free access to garbage also endangers bears. Garbage-habituated grizzly bears often are trapped and relocated by helicopter to distant areas of the park. This bear management technique is costly, dangerous to people and bears, and almost completely ineffective. Virtually all surviving bears return to their capture site in a few days. Because attempted relocations almost always fail, many garbage-habituated bears must be killed. The relocation of bears can be of value only if the garbage problem is eliminated concurrent with the removal of the garbage-habituated bear.

"The remedy is so simple. Separate garbage from bears. The park then achieves both public safety and a free-ranging, natural bear population. In Yellowstone National Park a concerted effort in the early 1970s reduced almost to zero the garbage available to grizzly bears. Yellowstone employed simple techniques such as electric fences, bear-proof garbage containers, and strict enforcement. The results are dramatic. In both 1978 and 1979 (to date), only one grizzly bear has been relocated and only one grizzly bear has been destroyed in Yellowstone. Yellowstone has over twice as many grizzly bears as Banff.

The situation in Lake Louise contrasts strongly with Yellowstone. During 1972-73, for example, garbage-habituated grizzly bears were removed from the Lake Louise area a total of 56 times. At least 9 grizzly bears were killed.

"Unfortunately, the garbage problem at Lake Louise has persisted since 1972. And the Chateau Lake Louise is the prime offender. About 6 grizzly bears have been destroyed in Banff National Park during 1979, most of these in the Lake Louise area. Several grizzly bears have been relocated from the Chateau Lake Louise, and at least one grizzly bear killed at the Chateau. The Chateau has repeatedly failed to apply simple and effective garbage handling techniques.

"Since, for many years, Parks Canada has been aware of the dangerous situation at the Chateau Lake Louise, our Association believes that this federal agency will be guilty of negligence, and probably will be legally liable, should any further human injuries occur in the Lake Louise area as a result of attacks by garbage-habituated bears.

"By charging the Chateau Lake Louise, Parks Canada has taken a step toward better human safety and preservation of park wildlife. Given the repeated failure of the Chateau Lake Louise to ensure acceptable garbage handling on its premises, Parks Canada had no choice but to charge the hotel with negligence."

- Mike McIvor

Editor's Note: A CBC newscast on Nov. 1 announced that the Chateau had been found guilty of the first charge laid, with additional charges pending. Mike McIvor reports that one additional charge was dismissed, and the Chateau found guilty of a third on Nov. 7.

Parks Canada Policy - According to an article by Bette Beswick in the Sept.-Dec. issue of the newsletter of the Calgary/Banff chapter of N.P.P.A.C., the Parks Canada Policy document which came out earlier this year clearly favours preservation over use. A copy may be obtained from:

W.R.O. Parks Canada
134 - 11 Ave., S.E.
Calgary, Alberta T2G OX5 - M.K.M.

Banff vs. Canmore? In another article in the Sept.-Dec. issue of the newsletter of the Calgary/Banff chapter of N.P.P.A.C., Stephen Herrero outlines the problems of stopping the "proliferation of profitable but unnecessary developments" in the townsite of Banff. Herrero suggests that proposed developments for Banff might be shifted to Canmore in conjunction with the development of Kananaskis Country. While overdevelopment there is hardly to be encouraged, the location of Canmore on the edge of Kananaskis Country might mean that the impact of developments in the town on Kananaskis Country might be relatively light, and his suggestion seems to deserve serious consideration. - M.K.M.

Canadian Wolf Defenders - Upcoming meetings of the Canadian Wolf Defenders announced in their Sept.-Dec./79 newsletter will be held at the Provincial Museum lecture room in Edmonton on Feb. 18 and April 21, 1980. No details were given. - M.K.M.

Waterton Elk - According to a note by Tracie Harris in the Sept.-Dec./79 issue of the newsletter of the Canadian Wolf Defenders, the provincial government is considering plans to change regulations on elk hunting in the vicinity of Waterton National Park. The new regulations proposed will attempt to avoid the situation in February 1979 when hunters chased elk out of the park in order to have them "legally" killed. The hunters were fined, but only with a very light fines.- M.K.M.

Alert and the Odessy - The Alberta League for Environmentally Responsible Tourism was established by a group of Rocky Mountain House Residents concerned about proposals to build a tourist resort close to the Kootenay Plains (see Alta. Nat. 9: 170-171, 1979). These plains are a unique area of dry fragile grasslands sheltered by the first range of the Rocky Mountains. They have already been diminished in size by the Big Horn Dam and the formation of Lake Abraham. Since the upgrading of the David Thompson Highway the remaining Kootenay Plains have been subject to much abuse especially by all terrain vehicle users.

The "Odessy" will be a convention centre catering to international clientel. It will be situated at the junction of the Cline and North Saskatchewan rivers, on some of the most scenic public land in this province. The close proximity of the site to the Kootenay plains is the main concern of the members of ALERT. They fear it will attract service industries, possibly stimulate the growth of a townsite or even be the beginnings of another "Kananaskis Country."

Despite repeated pleas for public hearings, letters and petitions, the developer, Van Dyke has recently been granted his lease, after he threatened to abandon the whole project if the Provincial Government continued to drag it's heels. His requests have been somewhat reduced, perhaps in reaction to intense public opposition to his proposals. The acreage has been reduced to 210 acres, but he cannot complain about the price at $10.38 per acre.

Many Albertans have a very special feeling for this unique region and the Kootenay Plains are a part of our native people's culture. They are important wintering areas for ungulates, including a herd of woodland caribou (*Rangifer tarandus caribou*). The numbers of elk (*Cervus elaphus*) have been greatly reduced since much of the plains were flooded, so the remaining sheltered grasslands are vital for the survival of the animals.

If the predicted environmental effects of the proposed facility make one question the wisdom of the enterprise, then the economic problems promise to be even more formidable. The members of ALERT consider the type of convention centre proposed by Van Dyke to be a big gamble. No convincing in depth market survey has been produced to prove the need for the development. It appears to be a risky venture to build an elaborate convention centre in such a remote location, especially when the only other motel between Nordegg and the Banff Jasper Highway is rumoured to be losing money. Questions have already been raised regarding the financial security of a developer who has requested assistance from the Heritage Trust Fund and applied for permission to build condominiums. Both of these applications were refused.

No on site staff housing will be permitted, but this seems to be an unimportant detail. Nordegg, the nearest town, is 25 miles (80 km) away. Nordegg is not suitable for housing developments because of problems with shallow bedrock formations. Rocky Mountain House is 100 km away. It is the nearest centre with a high school. If the staff are to be housed in Rocky Mountan House then it would make more sense to locate the proposed convention centre closer to an established community in a less sensitive area, where the impact of seven or eight hundred people would be less damaging. It is wasteful to sacrifice a valuable and irreplaceable piece of our land on a doubtful venture of this magnitude.

Fortunately, Van Dyke still has to comply with some stiff environmental terms of his lease and needless to say he is being closely watched by ALERT. There is still time to stop the Odessy. The Provincial Government may take notice if enough of us let them know what we think of this arrogant waste of public land. There are other less valuable places on which to locate golf courses and tennis courts. Ski areas do not belong in arid valleys. ALERT is just a small group of concerned individuals, but they have fought hard to preserve a valuable piece of our

heritage. They need our support. Please take the time to write your MLA, the Premier and the appropriate ministers to inform them how you feel about the prospect of losing another unique natural area. Van Dyke has already encountered a lot more opposition than he imagined, this convention centre is becoming his personal odessy. Let us show him that not all Albertans are placid Lotus Eaters.

- Dorothy Broadbent

Our native chokecherry, (*Prunus virginiana*) grows abundantly in the sand banks around the shores of Buffalo Lake, Ripening in mid-August, the glossy berries hand in thick clusters, and attract human pickers as well as birds. Great flocks of Bohemian Waxwings concentrate here, well into the winter months.

- Virginia R. Maitland
White Sands - Buffalo Lake

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WANTED: NATURE CENTRE VOLUNTEERS

Wanted: enthusiastic, people-oriented, healthy individuals to assist in the school, Brownie and Cub programmes at the Edmonton Nature Centre. We will provide you with the knowledge and techniques; you supply the enthusiasm and dedication of one day a week. 434-7446.

JUNIOR NATURALISTS' SECTION

THE PAINTED TURTLE

by Susan Kelndorfer (Gr. 6)

In this essay I will describe the Painted Turtle, it's location, one food the Painted Turtle eats, and who preys upon him. I will also tell why the Painted Turtle is so rare and endangered, and how he could be preserved. I will also give my personal feeling for the Painted Turtle.

The Painted Turtle is a reptile. They are identified by their dark, flattened, smooth edged shell. The carapace margin is red; so is the yellow streaked skin. The Painted Turtle's upper jaw is notched in front. The notch has a small projection on each side. Painted Turtles are shy and you can't capture them easily. They are nice pets but if you put them with fish they will attack the fish.

The location of the Painted Turtle is in the northern part of the United Sates and the southern part of Canada. They are mostly in the big swamps, ponds, or slow streams where there are many water plants.

The Painted Turtle eats water plants and insects. They are scavengers. They sometimes eat small fish.

Man hunts the Painted Turtle as the crocodile does too. The small turtle is sometimes hunted by the bigger fish.

The Painted Turtle is rare and endangered because men drain out sloughs to farm or on which to build a house. Then the plants dry out and they don't have any food. Their habitat is also ruined, and they have no place to live. They also use the Painted Turtle for Painted Turtle soup, so there are not many left.

The Painted Turtle could be saved by being caught if you are draining a slough and put in a pond where they could get taken care of.

I think the Painted Turtle is a very cute animal and I wish that he wasn't so rare. I also hope that people try to save him. I like animals and I hope other people like them too because if the Painted Turtle dies off, part of nature's life dies off.

References

Zim, H.S. and H.M. Smith. Reptiles and Amphibians. Golden Guide, Golden Press, New York.

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DEADLINES for submission of material are: January 15; April 15; July 15; and October 15. Please include your mailing address and telephone number. All maps and charts should be submitted on 8½ x 11" (or 8½ x 7") white bond. Please indicate in light pencil any data which are to be typed on charts, maps, etc. Black and white photographs, slides or drawings are welcomed.

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